

A Comparative, Relational Study of Social-Emotional

Learning and School Discipline by Race

by

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Abstract

Students of color in the United States have received school discipline with greater frequency and severity than White students. No known research exists which addresses the culturally responsive use of social-emotional learning universal screeners to address the discipline gap for students of color. The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado. The sample of 210 third-grade to fifth-grade students from six elementary schools was stratified into three equal-size groups by race. The Kruskal-Wallis H -tests with post hoc Mann-Whitney U -tests identified lesser frequency in out-of-school suspension (OSS) for Hispanic and Black students as compared to White students. Greater mean scale scores were identified in engagement for Black and Hispanic students as compared to White students. The Pearson Chi Square test detected a significant relationship between engagement and OSS and in-school suspension for both Hispanic and White students. Through the lenses of transformational leadership theory (Burns, 1978) and critical race theory (Bell, 1995), recommendations included the culturally responsive use of data and recognition of racism in the education system. Implications for leadership included facilitating educators' culturally responsive use of data and professional growth in culturally responsive instruction.

Keywords: discipline gap, racial identity, school discipline, school-to-prison pipeline, social-emotional learning, engagement, culturally responsive education

Dedication

This dissertation is dedicated to my family, who is a never-ending source of strength, inspiration, and pride. My father, Gary Parker, instilled a strong work ethic and the determination to provide opportunities for my family through hard work. He continues to be a role model for putting family first. My children, Chynah and Christian Rad have been a grounding force during the most challenging times and the most joyful times in life, including my dissertation journey. This milestone serves to honor the influence you have had and continue to have in my life.

This dissertation is also dedicated to my role models in the education profession with whom I have had the pleasure and honor to serve for the last 18 years. From administrators to teachers and paraprofessionals, I have been privileged to learn from the selflessness and courage of many of those with whom I share the tragedies and triumphs of public education. Stay strong!

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I am honored and proud to have successfully defended this dissertation on the 60th anniversary of Ruby Bridges' integration of William Frantz Elementary School in New Orleans, Louisiana on November 14, 1960.

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Chapter 1: Introduction

The racial discipline gap refers to a phenomenon involving disproportionate school discipline referral rates and severity of consequences for students of color as compared to White students (DeMatthews, 2016). Racial disparity in disciplinary consequences begins in preschool (Goplan & Nelson, 2019), where Black preschoolers were 3.6 times more likely to be suspended than White preschoolers during the 2015-2016 school year (United States Department of Education, 2018a). During the same year, Black male students accounted for 8% of public-school enrollment and 25% of suspensions and 23% of expulsions (United States Department of Education, 2018a).

Research to inform school discipline reform efforts by focusing on the social-emotional learning needs of students of color has produced mixed results (Gregory & Fergus, 2017; resulted Gregory, Huang, Anyon, Greer, & Downing, 2018; Mansfield, Fowler, Belser & Rainbolt, 2018). Researchers have advocated for the integration of school counseling support within multi-tiered systems of support (MTSS) to address the social-emotional learning needs of all students (Belser, Shillingford, & Joe, 2016; Goodman-Scott, Betters-Bubon, & Donohue, 2016; Olsen, Prikh-Fox, Flowers, & Algozzine, 2016; Sink, 2016; Ziomek-Daigle, Goodman-Scott, Cavin, & Donohue, 2016), and the specific needs of students of color (Belser et al., 2016). The term multi-tiered systems of support referred to a framework for a variety of school-based approaches to improve students' academic and behavioral performance (Sink & Ockerman, 2016; Utley & Obiakor, 2015). Prevention efforts within the MTSS framework have included the administration of universal screening in determining the level of need of all students (Arden & Pentimonti, 2017; Belser et al., 2016).

Universal screening is the systematic assessment of all students on social-emotional, behavioral, or academic indicators to identify students at risk of less than expected outcomes. Universal screening has facilitated the identification of social, emotional, behavioral, and academic problems before concerns escalate (Jenkins et al., 2014; Saeki et al., 2011). Educators have then placed students into tiers of intervention based on the level of need (Ziomek-Daigle et al., 2016).

Closing the racial discipline gap has required the investigation of factors that influence inequitable outcomes for marginalized populations (DeMatthews, 2016). Continued research to inform school discipline reform has further informed educators' efforts to achieve equity in school discipline for students of color. The comparative, relational study identified differences and relationships between student discipline data and social-emotional learning universal screener scores for Black, Hispanic, and White students to inform efforts to close the racial discipline gap. The independent variable was racial identity, and the dependent variables were the frequency of school discipline and social-emotional learning universal screener scores. One-way ANOVAs and *t*-tests were originally intended to identify any differences between the dependent variables of the frequency of school discipline and social-emotional learning screener scores and the independent variable of racial identity. The Pearson Product Moment Correlation test was intended to identify any relationships between social-emotional learning universal screener scores and racial identity for Black, Hispanic, and White students. The planned tests were replaced with the non-parametric counterparts in response to assumption testing results. An overview and introduction outline the background, problem, purpose, significance, research questions, hypotheses, theoretical framework, definitions of terms, assumptions, scope,

delimitations, limitations, and chapter summary for a quantitative study designed to inform efforts to close the discipline gap for Black and Hispanic students in the United States.

Background of the Problem

Inequity in school discipline for students of color has been part of a larger societal problem known as the school-to-prison pipeline (McCarter, 2017; Redfield & Nance, 2016). The racial discipline gap is one element of the school-to-prison pipeline, and a term used to describe a path from the education system to the criminal justice system, which has resulted in disparate outcomes for students of color (McCarter, 2017; Redfield & Nance, 2016). Inequity in outcomes has included less academic success, stricter school consequences, higher dropout rates, and disproportionate involvement in the criminal justice system for students of color compared to White students (McCarter, 2017; Redfield & Nance, 2016). The school-to-prison pipeline has grown over the last two decades because of changes in school discipline policy (McCarter, 2017). Prior to the school-to-prison pipeline concept, education systems were viewed as a protective factor for children, rather than a risk factor (McCarter, 2017). Research is needed to inform efforts to reform school systems into protective factors for students of color.

Many schools have avoided universal screening out of concern for limits in schools' ability to address all needs identified by a universal screener (Splett et al., 2018) and difficulty in identifying sound, affordable, brief instruments (Jenkins et al., 2014). Of the few schools which have systematically screened for behavior risk, most have relied on office discipline referral data, which are often founded in subjective criteria and linked to inequity in exclusionary discipline practices for students of color (Naser, Brown, & Verlenden, 2018). Reliance on office discipline

referrals to identify students' behavioral needs has been problematic because of poor reliability due to teacher inconsistency in reporting (Jenkins et al., 2014).

The extent of the problem has been rooted in the prevalence of reliance on subjective office discipline referrals. Subjective office discipline referrals, such as insubordination, have explained the vast majority of disproportionality in school discipline for Black, Hispanic, and Native American students (Girvan, Gion, McIntosh, & Smolkowski, 2017). The findings imply a link between disproportionality in discretionary office discipline referrals and teacher implicit bias (Girvan et al., 2017). Educational leaders and researchers can study efforts to close the discipline gap through the lenses of transformational leadership theory (Burns, 1978) and critical race theory (Bell, 1995), theoretical frameworks designed to guide systemic change efforts.

Statement of the Problem

The problem has been standardized social-emotional learning universal screeners have not provided educators with sufficient information to implement interventions to close the discipline gap for Black and Hispanic students in the United States. While universal screening effectively identifies students at risk for negative outcomes and assesses the effectiveness of universal curriculum (Arden & Pentimonti, 2017; Mellard, 2017; Pentimonti, Walker, & Edmonds, 2017), a gap in the literature has persisted in culturally responsive adaptations to the use of universal screeners and in the interpretation of universal screener data from the perspective of students of color. Brown, Maggin, and Buren (2018) conducted a systematic review of research on cultural adaptations to social-emotional learning interventions and indicated a need for continued research due to a small sample of studies eligible for review. The complexity of MTSS has made a quantitative study of the topic challenging, perpetuating a gap

in empirical research on the topic (Wilson & Duda, 2018). An additional gap has existed in studying universal screener data and discipline data with the population of the study. The comparative, relational study of social-emotional learning and school discipline by racial identity has contributed to the shortage of empirical studies on the culturally responsive use of universal screeners within the MTSS model and with the study population.

Purpose of the Study

The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado. The findings provided educators at the site with information about the differences in school discipline by racial identity and the relationships between racial identity and social-emotional learning universal screener scores. Recommendations for how to use the data in a culturally responsive manner to close the discipline gap for students of color and implications for leadership follow the findings. The blending of aspects of transformational leadership theory and critical race theory supported the goals of the study through the shared tenants of overturning the status quo through profound change and including the voices of those with less power (DeMatthews, 2016; Deschamps, 2016; Moody & Toni, 2017). Without the results, educators may continue to administer universal screening without considering cultural differences in students' social-emotional learning needs, and the discipline gap may persist. Efforts to decrease the discipline gap may not be consistently successful until educators confront the role of power, privilege, and cultural difference in the

social-emotional functioning of minority students (Gregory & Fergus, 2017). Through the lens of transformational leadership theory (Burns, 1978) and critical race theory (Bell, 1995), the study filled a gap in the literature by using empirical methods to inform efforts to use social-emotional learning universal screener data in a culturally responsive manner to close the discipline gap for students of color.

Significance of the Study

The study contributed to the knowledge base by revealing implications for how educators can use universal screener data within a culturally responsive context to reduce the discipline gap for students of color. Findings may support educators' efforts to recognize inequity in discipline and differences in social-emotional learning needs within the population by racial identity. Increased cultural responsiveness through the application of social-emotional learning universal screener data may lead to increased equity in school discipline for students of color and improved outcomes related to the school-to-prison pipeline, including academic success, dropout rates, and involvement in the criminal justice system (McCarter, 2017; Redfield & Nance, 2016).

Research Questions

Quantitative research questions explore the relationships among variables to focus on the purpose of the study. The relationships among the variables answered the research questions (Creswell & Creswell, 2018). To address the problem and achieve the goals of the quantitative, comparative, relational study, the research questions were as follows:

Research Question One: What were the statistically significant differences, if any, in the frequency of in-school suspension, out-of-school suspension, and expulsion for Black, Hispanic, and White students in an urban school district in Colorado?

Research Question Two: What were the statistically significant differences, if any, in the social-emotional learning universal screener scores for Black, Hispanic, and White students in an urban school district in Colorado?

Research Question Three: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for Black students in an urban school district in Colorado?

Research Question Four: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for Hispanic students in an urban school district in Colorado?

Research Question Five: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for White students in an urban school district in Colorado?

Hypotheses

A hypothesis is a prediction about an expected relationship between variables.

Quantitative hypotheses are estimates of numeric population values based on outcomes collected from a sample (Creswell & Creswell, 2018). The following hypotheses were predictions related to the research questions:

H₁₀: No statistically significant difference existed in the frequency of in-school suspension, out-of-school suspension, and expulsion among Black, Hispanic, and White students.

H_{1a}: The frequency of in-school suspension, out-of-school suspension, and expulsion among the three groups were not equal.

H2₀: No statistically significant difference existed in students' social-emotional learning universal screener scores among Black, Hispanic, and White students.

H2_a: The social-emotional learning scores among the three groups were not equal.

H3₀: No statistically significant relationships existed between social-emotional learning universal screener scores and the frequency of school discipline for Black students.

H3_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for Black students.

H4₀: No statistically significant relationships existed between social-emotional learning universal screener scores and the frequency of school discipline for Hispanic students.

H4_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for Hispanic students.

H5₀: No statistically significant relationships existed between social-emotional learning universal screener scores and the frequency of school discipline for White students.

H5_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for White students.

Theoretical Framework

Transformational leadership theory (Burns, 1978) and critical race theory (Bell, 1995) served as the theoretical framework through which the research problem and purpose were

explored. In Burns' (1978) transformational leadership theory leaders detected and executed needed change with committed followers. Leaders inspired followers to rise above self-interest for the greater good and inspired motivation to change partially through social justice (Deschamps, 2016). Bell (1995) led the formation of critical race theory, which called for researchers and educators to reflect on the injustice of intended and unintended racism that exists in the education system (DeMatthews, 2016). According to critical race theory, developing potential solutions to racism requires an understanding of the phenomenon from the perspective of the disempowered (Simson, 2014).

The research questions and hypotheses were based on a framework in which the independent variable was racial identity, and the dependent variables were the frequency of school discipline, social-emotional learning screener scores on the Panorama Social-Emotional Learning Survey, and the relationships between school discipline and social-emotional learning scores. The literature review provided further evidence of connections between racial identity, school discipline, and social-emotional learning competencies, including how the principles of transformational leadership theory and critical race theory relate to matters of race inequity in education systems. The blending of aspects of transformational leadership theory and critical race theory supported the aims of the study by addressing the need for change in approaches to closing the racial discipline gap in schools from the perspectives of students of color (DeMatthews, 2016; Deschamps, 2016; Moodly & Toni, 2017; Simson, 2014).

Definitions of Terms

Definitions of key terms and jargon offer clarity of meaning (James & Slater, 2014). Terms may have different meanings in different contexts. Operational definitions of key

concepts and variables were included to establish a common understanding of the use of terms in context.

Discipline gap: a term used to describe more frequent and severe school discipline consequences for students of color compared to White students (DeMatthews, 2016).

Equity: achieving parity of educational outcomes (Bauman, Bustillos, Bensimon, Brown, II, & Bartee, 2005) by creating educational environments that foster the success of students of color (Bensimon, 2005).

Implicit bias: unconscious and relatively automatic features of prejudiced judgment and social behavior (Brownstein & Saul, 2016).

Large, urban school district: a school district that enrolls more than 10,000 students (Dun & Bradstreet, 2019) and is in a densely settled area with a minimum population of 50,000 people (United States Census Bureau, 2019).

Racial identity: independent variable where constructionists use existing societal knowledge occurring through social interaction as the tools to construct, not create, new knowledge through research inquiry. Racial identity is a nebulous concept, lacking a universally accepted definition, relying on one's positionality (Endale, 2018). Participants' or guardians' identification of race on school enrollment documents operationalizes racial identity in the study.

School discipline: dependent variable where adverse discipline actions are administered by a school official such as in- and out-of-school suspensions and expulsions (Goplan, 2019).

Social-emotional learning: a process for helping people develop the skills necessary for life effectiveness (Collaborative for Academic, Social, and Emotional Learning, 2007).

Social-emotional learning universal screener scores: dependent variable where social-emotional learning screener scores on the Panorama Social-Emotional Learning Survey include scales of compassion, emotion regulation, engagement, grit, learning strategies, self-efficacy, self-management, sense of belonging, and social awareness. Further definition of the social-emotional learning scale terms is provided in Appendix A. Scores on the scales are reported on a scale of 1-5 (Panorama Education, 2016b).

Assumptions

Assumptions in a study may pertain to underlying theories, relationships among variables, measurement, setting, population or sample, data collection and analysis, result interpretations, and conclusions (Theofanidis & Fountouki, 2018). The collection and analysis of archival social-emotional learning universal screener data, school discipline data, and racial identity data required the assumption of honest and accurate data entry. An assumption was students provided honest and accurate responses to the universal screener survey. Another assumption was administrators entered honest and accurate incidents of school discipline for the school year under study, and registrars entered racial identity data honestly and accurately. Cultural neutrality of the social-emotional learning universal screener instrument was presumed, and survey administration by school personnel was assumed to have occurred under the testing conditions recommended by the test publisher. The assumptions were necessary, as the design included archival data for which data entry controls could not be implemented because data entry had already occurred. No assumption was made about a causal relationship among variables of school discipline, social-emotional learning universal screener data, and racial identity.

Scope and Delimitations

Delimitations are the limitations consciously set by the investigator, which make the aims of the research attainable. The restrictions may relate to theoretical background, objectives, research questions, variables, and the sample (Theofanidis & Fountouki, 2018). The study focused on one large, urban school district in the state of Colorado. The sample consisted of 70 Black students, 70 Hispanic students, and 70 White students at six elementary schools. Students of other racial identities were not included due to the small population and sample size. Middle school and high school students were not included because only six elementary schools in the site district completed the social-emotional learning universal screener survey during the survey pilot year. The scope of the study likely limited the generalizability of the findings to other schools beyond the six included elementary schools.

Reasons for delimitations include available resources, local circumstances such as practical access, ethical and permit considerations, or time constraints (Theofanidis & Fountouki, 2018). Data collection involved student discipline data from the 2017-2018 school year and social-emotional learning universal screener data from the fall of 2018. Data from a longer timeframe was not studied due to time constraints associated with data collection. A more recent time period was not studied due to the possibility of school discipline data confounding universal screener data after the pilot year due to student mobility and the application of universal screener data to lower school discipline rates and increase social-emotional learning competencies.

Limitations

Limitations concern weaknesses of the research which are out of the researcher's control. Limitations are closely associated with the research design, results, and conclusions and should

be clearly acknowledged (Theofanidis & Fountouki, 2018). Threats to internal validity can result when participants possess qualities that create a predisposition to certain outcomes (Creswell & Creswell, 2018). Sample selection in the study was managed with stratification and modified random sampling to provide all characteristics of the population an equal probability of distribution among the sample groups. The use of archival data potentially posed a threat to internal validity because the circumstances of data collection were not controllable, requiring the assumptions of honest and accurate data collection with reasonable survey conditions.

The social-emotional learning universal screener was a computer-based survey, which controlled for social desirability bias, as computer-based procedures have been found to elicit more truthful responses than paper surveys (Gnambs & Kaspar, 2015). Control for threats from omitted variables in using archival survey data involved refraining from adding social-emotional learning variables to the study (Speklé & Widener, 2018). Threats to external validity can result in incorrect inferences about the population from the sample outcomes (Creswell & Creswell, 2018). Due to the restrictive nature of inclusion criteria for the population under study, findings were only generalized to the study's small population.

Survey research is a non-experimental approach for gathering information about the incidence, distribution, and relationships between variables (Coughlan, Cronin, & Ryan, 2009). Because survey research is non-experimental, no causal relationships between variables can be assumed whether differences or relationships are found. A relationship is neither required nor sufficient to establish causation (Reiss, 2011). The inability to determine causal relationships was a limitation of the comparative, relational research.

Chapter Summary

The introduction and overview highlighted the components of a quantitative, comparative, relational study of social-emotional learning and school discipline by racial identity. The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado. Comparative and relational statistical methods were used to analyze school discipline data for the 2017-2018 school year and social-emotional learning universal screener data collected in the fall of 2018 for Black, Hispanic, and White students.

The problem has been standardized social-emotional learning universal screeners have not provided educators with sufficient information to implement interventions to close the discipline gap for Black and Hispanic students in the United States. Earlier sections introduced the research questions and hypotheses of the study, the theoretical frameworks upon which the study was framed, and the methodological design, which addressed the research questions and hypotheses. The overview defined terms, assumptions, scope, delimitations, and limitations of the study. The potential significance of the study included implications for how educators can use universal screener data within a culturally responsive context to reduce the discipline gap for students of color. While the introductory chapter provided a brief overview of the relevant literature, the literature review thoroughly covers the research related to critical race theory,

transformational leadership theory, racism in education, MTSS, and universal screening as a potential tool to close the racial discipline gap.

Chapter 2: Literature Review

Black and Hispanic students experience disproportionately higher rates and greater severity of school discipline than White peers (DeMatthews, 2016). Reducing office discipline referrals could interrupt the negative path of loss of instructional time, falling behind, becoming disengaged, and dropping out of school (Gregory et al., 2016b). The problem has been standardized social-emotional learning universal screeners have not provided educators with sufficient information to implement interventions to close the discipline gap for Black and Hispanic students in the United States. The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado. Racial identity, the frequency of school discipline, and social-emotional learning scores for third-grade to fifth-grade students in six public elementary schools were the data that informed the scientific inquiry.

The literature review is a synthesis of literature relevant to the problem from multiple sources to generate a comprehensive understanding of what is known and unknown about an issue, thereby justifying the need for further research (Hart, 2018). The first goal of the literature review was to list the library databases, search engines, and key search terms used in the conduct of the literature review. The second goal was to identify, describe, and justify the theoretical framework for the study. The third goal of the literature review was to examine literature relevant to the racism in education systems, the blending of social-emotional learning and MTSS to address student needs in the school setting, and the role of universal screening in identifying

students' needs. The fourth goal was to examine prior methodologies used to explore these topics. The main purpose of a thorough literature review is to generate a research question by evaluating the available literature and identifying opportunities for further research (Grewal, Kataria, & Dhawan, 2016). The final aim of the literature review was to identify gaps in the literature regarding the use of MTSS in addressing students' social-emotional learning needs and closing discipline gaps for students of color.

Topic sections in the chapter include the literature search strategy and the theoretical framework blending critical race theory (Bell, 1995) and transformational leadership theory (Burns, 1978). Topics explored in the literature review include an overview of racism in education with a specific examination of the racial discipline gap, an overview of MTSS, and a specific examination of universal screening as a potential tool to close the discipline gap by identifying the social-emotional learning needs of students of color. Gaps in the literature are identified throughout the review, and trends in research design are summarized at the end of the chapter.

Literature Search Strategy

The literature search focused on three major topics: racism in education, the blending of social-emotional learning and MTSS to address the discipline gap, and the role of universal screening in identifying students' needs to inform prevention and intervention efforts. Google Scholar is among the search engines with the greatest sensitivity (Campbell, Taylor, Bates, & O'Connor-Bones, 2018). Search engines demonstrate more sensitivity when used with AND, OR, NEAR, and NOT Boolean operators to increase precision (Campbell et al., 2018).

The literature search included the use of the American College of Education's online

library using Boolean operators AND and OR to identify full-text files of scholarly, peer-reviewed journal articles published since 2015. The ACE online library supplied access to multiple extensive databases such as ERIC, EBSCOHost, JSTOR, ProQuest, and SAGE. The Google Scholar search engine was used with the “with the exact phrase” filter to find further scholarly works.

The critical analysis of the literature included different, purposefully selected sources (Nakano & Muniz, Jr., 2018). The United States Department of Education and Collaborative for Academic, Social, and Emotional Learning (CASEL) websites were searched for reports and statistics. Books referenced in the literature review were obtained from a personal library, a public library, a professional school district library, and online books accessed through Google Scholar. The following key terms were used to perform the literature search: *transformational leadership, critical race theory, critical theory, educational leadership, implicit bias, unconscious bias, stereotype, microaggression, colorblind, merit*, race, racial identity, racism in education, social justice, White privilege, school discipline, exclusionary discipline, suspension, discipline gap, office discipline referral, expulsion, school*, education* multi-tiered system* of support*, MTSS, response to intervention, positive behavior intervention, implementation science, social-emotional learning, and universal screen**. Terms were searched using the fields of subject (SU) and title (TI). The search strategies using key terms listed above resulted in a thorough search of the literature on social-emotional learning and school discipline by racial identity.

Blended Theoretical Framework

Transformational leadership theory and critical race theory provided the theoretical framework through which the problem and purpose of the study were explored. Transformational leadership theory (Burns, 1978) and critical race theory (Bell, 1995) share the tenant of overturning the status quo through profound change (DeMatthews, 2016; Deschamps, 2016; Moodly & Toni, 2017). Transformational leaders strive to replace dysfunctional social relations, institutions, policies, and practices with reformed ways of being and interacting (Moodly & Toni, 2017). In transformational leadership theory leaders identify and execute needed change with committed followers (Deschamps, 2016). Leaders inspire followers to rise above self-interest for the greater good and inspire motivation to change partially through social justice (Deschamps, 2016). Critical race theorists and practitioners reflect on the injustice of intended and unintended racism in educational systems (DeMatthews, 2016). According to critical race theory (Bell, 1995), developing potential solutions to racism requires an understanding of the phenomenon from the perspective of the disempowered (Simson, 2014). Blending aspects of transformational leadership theory and critical race theory supported the purpose of the study by addressing the need for change in approaches to closing the racial discipline gap from the perspective of students of color.

Transformational Leadership Theory

Transformational leadership is a leadership type that transforms followers into a higher realm of motivation through inspiration to rise to higher levels of performance (Burns, 1978). Transformational leaders exhibit idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation in interactions with subordinates (Bass, 1985). Though

originally intended to apply to business settings, research has supported the efficacy of transformational leadership in school settings (Anderson, 2017). Idealized behaviors and inspirational motivation are positively associated with the seven dimensions of school climate (order, leadership, environment, involvement, instruction, expectations, and collaboration), and a positive school climate can facilitate school change efforts (Allen, Grigsby, & Peters, 2015).

Transformational leadership and social justice. Transformational leadership has more specifically been studied as a factor in achieving social justice change in the school setting (Arar, Beycioglu, & Oplatka, 2017; DeMatthews, Mungal, & Carrola, 2015; Kemp-Graham, 2015; Zhang, Goddard, & Jakubiec, 2018). Awareness and critical reflection are key aspects of socially-just leadership (Kemp-Graham, 2015). Graduates of some principal preparation programs are largely unaware of social oppression, underscoring the need for training in the social justice aspects of transformational school leadership (Kemp-Graham, 2015). Principals operate from a position of privilege and have the responsibility to engage in critical reflection to reach social-justice-oriented decisions (DeMatthews et al., 2015). A significant relationship exists between socially-just school leadership and the leader's awareness of the political, economic, and cultural context of a community (Zhang et al., 2018). The more school leaders are aware of students' contexts, the more school leaders are able to establish trust and discourse with all stakeholders and to distribute an organization's resources equitably (Arar et al., 2017).

Research has uncovered characteristics and behaviors associated with the transformational, socially-just school leader (Flood, 2017; Jayavant, 2016; Wiemelt & Welton, 2015; Young & Bryan, 2015). Transformational, socially-just principals ensure opportunities for success for all students (Wiemelt & Welton, 2015). Leaders engage in behaviors such as

promoting dual language programming, fostering relationships across cultures, experiencing knowledge as strength, and exercising bilingual instructional leadership (Wiemelt & Welton, 2015). Parental upbringing, experiences in college, and meaningful relationships with mentors influenced the development of transformational, socially-just leaders (Flood, 2017).

Characteristics of socially-just leaders include self-awareness, social awareness, moral purpose, trust, courageous conversations, and social responsibility (Jayavant, 2016). School counselors show transformational leadership through interpersonal influence, collaboration, problem-solving, professional efficacy, and social justice advocacy (Young & Bryan, 2015).

Principals who are socially-just exercise influence by putting students at the center of decision making, fostering positive relationships with families, and building school climate through social justice (Wang, 2018). By breaking ranks through shared leadership and decision-making, the school leader disrupts the hierarchical relationships between school administration and constituents, empowering and allowing marginalized students to become active participants in the democratic process (Cheung, Flores, & Sablo-Sutton, 2019). Transformational leadership and social justice are closely connected through shared tenets of identifying, transforming, and eradicating systems of inequity, disparity, and injustice (Marbley et al., 2015). Transformational leadership theory supports the purpose of the study by addressing the need to inspire and motivate change in the management of school discipline for students of color.

Critical Race Theory

Legal scholars of the Civil Rights era developed critical race theory (Bell, 1995) as a framework for disrupting racism in response to dissatisfaction with the lackluster focus on White supremacy in the United States legal system (McCoy & Rodricks, 2015; Zorn, 2018). Critical

race theory challenges normalized, White, Eurocentric values that oppress peoples of color in legal and education systems (Hiraldo, 2019; McCoy & Rodricks, 2015; Zorn, 2018). Tenets of critical race theory (Bell, 1995) include the permanence of racism, the value of experiential knowledge and counterstorytelling of peoples of color, the advancement of racial equality through interest convergence, the influence of the intersectionality, Whiteness as legally protected property, and the critique of liberalism which serves the self-interest of those in power, (Capper, 2015; DeMatthews, 2016; Hiraldo, 2019; McCoy & Rodricks, 2015). Critical race theory becomes meaningful when theory facilitates models of praxis that integrate social justice into research design and practice (Critical Race Theory and the Next 20 Years, 2015; Hiraldo, 2019).

The empirical, personal, and political primacy of racism is the core concern for critical race scholars (Gillborn, 2015). Bell (1995) coined the term “racial realism” to challenge the notion of “racial equality” by focusing on the unlikelihood of the existence of equality for minorities. Bell urged theorists and activists to focus efforts on racial realism to accurately understand and respond to pervasive oppression by replacing distorted ideals with realistic action. The concept of racial realism continues to lead some theorists and practitioners to believe education justice is an unrealistic ideal (Rector-Aranda, 2016).

Critical race theory in education. Critical race theory assumes racism exists in education systems (Capper, 2015; DeMatthews, 2016; McCoy & Rodricks, 2015). Ladson-Billings and Tate (1995) first introduced critical race theory into the field of education, proposing schools often deny the experiences, histories, and perspectives of peoples of color, White teachers typically view children of color from a deficits-based perspective, and

multicultural education is limited in scope and depth. Critical race theorists argue racial stigmatization, stereotyping, and implicit biases in education are evidence of a long history of racial prejudice in the US, which dictates seemingly objective standards of appropriate behavior and practices used to enforce such standards (Simson, 2014).

Education leaders can challenge racism by talking about racism openly and often, evaluating professional development on race based on the extent to which the critical race theory tenets are represented, conducting equity audits of organizations, and addressing power, privilege, and racism in the curriculum and school culture (Capper, 2015). By anticipating the property interests at stake and the resistance from White families to equity work, leaders can ensure peoples of color are authentically included in decision making about strategies and plans to eliminate racial inequities (Capper, 2015). White educators can confront White privilege in the classroom by self-initiating exploration of the origin of prevailing attitudes and beliefs, listening to students' stories, self-interrogating motives, and beliefs, becoming an ally, remaining vulnerable to challenges of White supremacy, rejecting White privilege, and actively challenging inequity (Miller & Harris, 2018).

Applying critical race theory in educational settings enables researchers and practitioners to analyze practices and ideologies through a race-conscious lens, address critical questions regarding the traumas affecting communities of color and inequitable educational practices (McGee & Stovall, 2015; Miller & Harris, 2018), and value the rich cultural foundations of children of color (Miller & Harris, 2018). Because students of color are subject to stereotyping, racism, traumatizing practices, and discriminatory policies and ideologies, students of color's mental health needs are of the utmost importance to scholars who study the systemic functions

and consequences of racism (McGee & Stovall, 2015). Within critical race theory, leaders speak plainly about the harm done to students of color by majoritarian policies and procedures (Capper, 2015) and use alternative strategies, such as restorative practices, to weaken and reverse the disproportionately negative impact of policies such as punitive school discipline on students of color (Simson, 2014). Critical race theory supported the purpose of the study by addressing the need for change in approaches to preventing punitive discipline and closing the racial discipline gap from the perspective of students of color (Simson, 2014).

Research Literature Review

The literature review is a synthesis of literature relevant to the problem from multiple sources to generate a comprehensive understanding of what is known and unknown about an issue, thereby justifying the need for further research (Hart, 2018). Research literature reviews make a case for the research questions by evaluating the available literature and identifying gaps in the research and opportunities for further research (Grewal et al., 2016). This research literature review examines literature relevant to the racism in education systems, the blending of social-emotional learning and MTSS to address student needs in the school setting, and the role of universal screening in identifying students' needs.

Racism in Education

The United States public school system is rife with examples of inequity in school funding, distribution of qualified teachers, access to challenging curriculum, segregation, and academic outcomes such as graduation rates and dropout rates (Joseph, Viesca, & Bianco, 2016), all within the context of the US (United States) becoming increasingly multicultural (United States Department of Education, 2018a). By 2016, enrollment of White students in US public

schools was 49%, making the size of the White student group smaller than the combined size of racial minority groups for the first time in US history. The 2015-2016 Civil Rights Data Collection School Climate and Safety Report (United States Department of Education, 2018a) statistics quantify the extent to which race is a factor in educational outcomes in the US. White students comprised 49% of public-school enrollment but only accounted for 36% of students referred to law enforcement. Black and Hispanic students comprised 41% of enrollment and 55% of law enforcement referrals (United States Department of Education, 2018a). Race was reported as the basis of 23% of all reports of school bullying, of which 55% of the reporters of bullying were Hispanic or Black (United States Department of Education, 2018a).

From an academic perspective, Black students made up 11% of eighth-grade Algebra I enrollment but 17% of total eighth-grade enrollment (United States Department of Education, 2018b). Hispanics constituted only 18% of Algebra I students in eighth grade but 25% of total eighth-grade enrollment (United States Department of Education, 2018b). Black and Hispanic students were similarly underrepresented in almost all high school math and science courses (United States Department of Education, 2018b). Counter to outcomes for Black and Hispanic students, White students accounted for 49% of eighth-grade enrollment, 58% of eighth-grade Algebra I enrollment, and disproportionately higher enrollment in most higher-level high school math and science courses (United States Department of Education, 2018b).

The education system contributes to segregation, partially through the charter school and choice reform movements (Brooke, 2015; Martin & Varner, 2017; McWilliams, 2017). The ability of the racial majority to determine access to the opportunity of the racial minority can lead to policies such as residential segregation, which can result in benefits for the dominant group

and disadvantaged racial minority groups. Where one lives affects access to services, food, safety, and education (Martin & Varner, 2017). Geography and access policies result in segregation of charter school students by socio-economic background (Brooke, 2015). Students from economically advantaged backgrounds are over-represented in the charter system, leaving increasingly divested neighborhood schools to educate the nation's most vulnerable students (McWilliams, 2017).

Implicit bias. Educators perpetuate racism in education through implicit bias toward students of color (Assari, 2018; Campbell, 2015; Chestnut, Lei, Leslie, & Cimpian, 2018; Okonofua & Eberhardt, 2015; Rukavina, Langdon, Greenleaf, & Jenkins, 2019). In a study by Okonofua and Eberhardt (2015), racial biases were evident when teachers were asked to assign severity, disruption, irritation levels, and disciplinary action necessary for multiple infractions by fictional, racially-stereotypically-named students. Teachers reported more concern and desire for a more severe consequence after the second infraction by a student with a stereotypically Black name than by a student with a stereotypically White name (Okonofua & Eberhardt, 2015). The more likely teachers were to assume the student was Black, the more likely the teacher perceived misbehavior as a pattern (Okonofua & Eberhardt, 2015).

Educators' racial bias is observed across content areas and compounds at the intersection of race and other forms of bias (Assari, 2018; Campbell, 2015; Chestnut et al., 2018; Rukavina et al., 2019). A significant relationship existed between a physical education teacher's task orientation and attitudes toward cultural pluralism and diversity, and a positive relationship existed between ego orientation and being uncomfortable with diversity (Rukavina et al., 2019).

Teachers showed biases in ratings of students' reading and math ability and attainment according to income level, gender, special educational needs status, and ethnicity (Campbell, 2015).

Assari (2018) confirmed the intersection of race and gender shaped bias against Black students, potentially contributing to the dropout rate of Black boys. The intersection of gender and race was as problematic for Black girls in math courses because girls and minorities were stereotyped as lacking the intelligence required to be successful in math (Chestnut et al., 2018). Students demonstrated endorsement of negative stereotypes in mathematics, linking ability to fixed traits such as race (Picho, 2016). The more people considered brilliance in a field of study as a requirement for success, the less likely the field was to have a strong representation of female and African-American doctoral graduates (Leslie, Cimpian, Meyer, & Freeland, 2015). Educators express implicit bias through colorblindness, microaggressions (Carter, Skiba, Arredondo, & Pollock, 2017), and notions of merit (Capper, 2015).

Colorblindness. Dominant White systems assume all races are treated the same through “colorblindness,” negating and dishonoring racial identity and experience and supporting the racist naturalism of Whiteness (Matias & Liou, 2015). Colorblind culture in White normative schools, education policies, and teacher education programs perpetuated racist practices, leading Black female adolescents to experience differential treatment, stereotyping, and low teacher expectations (Joseph et al., 2016). Gregory and Fergus (2017) identified colorblind concepts of social-emotional learning, which did not consider power, privilege, cultural difference, and limits in adult social-emotional learning competencies as the reasons for limited promise in attempts at school discipline reform. The role of the school leader is to acknowledge races and cultures in schools, to reach out to families and students, and to recognize the value and unique needs of

populations of color (Capper, 2015). Counter to much of the literature on colorblindness, indications of emergent awareness and political clarity existed concerning colorblindness among educators, who were aware of race as a real structural impediment for Black males, suggesting a readiness to address colorblindness in education openly (Allen et al., 2015).

Microaggression. Microaggressions are unintentional (Gregory, Bell, & Pollock, 2016a) or intentional commonplace, hurtful comments, or behaviors, which communicate hostility, insensitivity, or negativity (Payton, Yarger, & Pinter, 2018). The frequency of microaggressions has a cumulative negative impact on academic achievement, feelings of isolation, and depression (Sue, 2010). Though little research exists on microaggression in young children, a review of recordings from an exemplary third-grade classroom used to train new teachers in culturally responsive strategies revealed even experienced teachers exhibited microaggressions toward students of color and female students, revealing how teacher education experts did not readily recognize microaggressions (Beaulieu, 2016). The phenomenon may explain why students and faculty of color often experience microaggressions in higher education (Locke & Trolan, 2018; Payton et al., 2018; Tachine, Cabrera, & Yellow Bird, 2017).

A study of 228 school psychology students found a significant difference in the means of racial microaggressions between Black and multiethnic students, with Black interns reporting the highest frequency of microaggressions in the workplace and at school (Proctor, Kyle, Lau, Fefer, & Fischetti, 2016). An alternate perspective of microaggression was found in reporting the experiences of Asian American and Latinx students enrolled at a historically Black university. Students of Asian and Latinx descent reported microaggressions such as stares, insensitive comments, and jokes from Black peers (Palmer & Maramba, 2015).

Counternarratives illuminate the microaggressions experienced by peoples of color (Capper, 2015). The reason for constructing a counternarrative is to voice the perspectives of people excluded from the master narrative (Miller & Harris, 2018). One such hegemonic narrative which reinforces microaggressions involves the notion of grit and perseverance, creating the circumstances by which all students can achieve success (Tefera, Hernández-Saca, & Lester, 2019). The association of grit with achievement results in deficit-based beliefs about students who struggle in school and places the locus of control for the problem within the student (Tefera et al., 2019). The counternarrative describes students who demonstrate grit in alternative ways and other areas of life and places the locus of control for the problem on a definition of success associated with performance on high stakes testing (Tefera et al., 2019).

Regardless of how subtle or inconsequential microaggressions may seem, a negative impact on the student-teacher relationship results (Beaulieu, 2016). In the intersection of disability and Latinx culture, microaggressions included low expectations, disregard, and bullying, sometimes resulting in refusal of academic services, thereby creating another barrier to academic success (Dávila, 2015). Educators' knowledge of students' lived experiences can help stop microaggressions in the school environment (Gregory et al., 2016a).

Meritocracy. Meritocracy is a microaggressive theme expressed through comments claiming success is influenced by merit, such as hard work, rather than by race (Proctor et al., 2016). A basic tenet of critical race theory is to challenge meritocracy, neutrality, and objectivity (Capper, 2015; Davis, Gooden, & Micheaux, 2015; Joseph et al., 2016; McCoy & Rodricks, 2015). The concept of grit sustains meritocratic and microaggressive ideology in schools by

suggesting students of color are less worthy of success due to a lack of perseverance (Tefera et al., 2019).

Despite students' hard work, the education system systematically excludes students of color from educational opportunities, and the hard work of some is inequitably rewarded compared to the hard work of others (Hayes & Fasching-Varner, 2015). The research on merit-based scholarships is conflicting. While the University of Arizona found merit-based scholarships had the greatest positive effect on African American and Hispanic enrollment (Upton, Jr., 2016), law school policies on merit scholarship benefitted students from privileged backgrounds, and increased debt for students from disadvantaged backgrounds (Taylor, 2018).

Wells (2017) examined the impact of meritocracy in the case of merit-based law school admissions when merit was defined as grade point averages and LSAT scores. The narrative of the law school was admission based solely on scores that would result in disproportionately White admissions, allowing admission for some less qualified people of color (Wells, 2017). The narrative equating merit with scores was microaggressive and stigmatic because the dominant narrative singled out the group as less worthy (Wells, 2017). Meritocracy in higher education extends from faculty to students (Hossain, 2015; Rector-Aranda, 2016). Hossain (2015) found a qualitative connection between college student disbelief in White privilege, attribution of privilege to the non-White group, and a belief in meritocracy. The meritocratic mandate to "pull one's self up by the bootstraps" dismisses unsuccessful education reforms and places blame on students, teachers, and schools (Rector-Aranda, 2016). Bootstraps theory embodies the implicit bias perpetuated in the US education system through victim-blaming (Rector-Aranda, 2016).

The Racial Discipline Gap

The impact of racial bias in US schools is evident in disproportionate outcomes for Black and Hispanic students in school discipline (Goplan & Nelson, 2019; United States Department of Education, 2016; United States Department of Education, 2018a). Figures 1 and 2 illustrate the disproportionate rates at which Black males and females and Hispanic males and females were suspended and expelled from United States public schools compared to White students during the 2015-2016 school year (United States Department of Education, 2018a). The racial discipline gap becomes apparent in preschool (Goplan & Nelson, 2019) where Black students are 3.6 times more likely to receive OSS than White preschoolers (United States Department of Education, 2016). Not only do students of color receive disciplinary consequences at higher rates than White students, but the discipline of Black and Hispanic students is of greater severity than for White

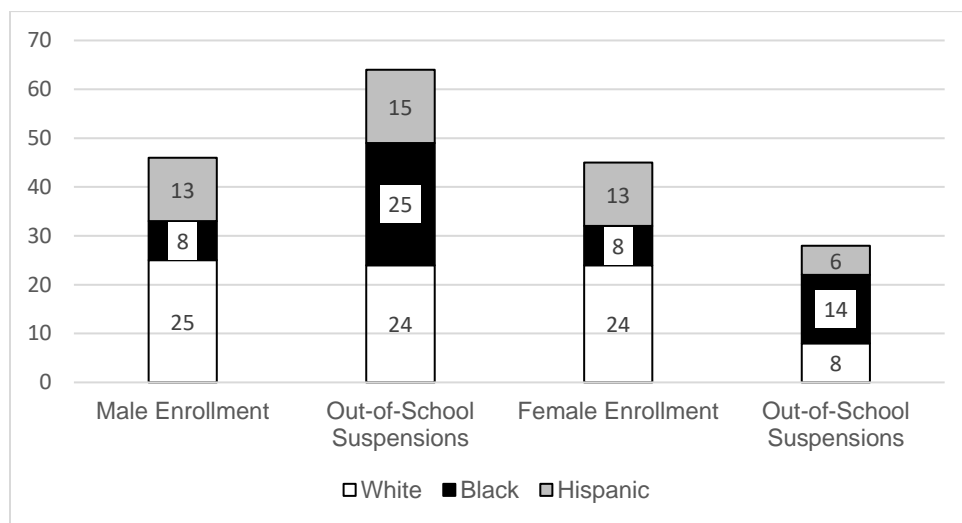


Figure 1. United States Public schools' percentage distribution of out-of-school suspensions. Suspensions in the 2015-2016 school year compared to the percentage of enrollment for Black, Hispanic, and White males and females. Adapted from "Percentage distribution of students receiving one or more out-of-school suspensions, by race and sex," by United States Department of Education, 2018, 2015-2016 Civil Rights Data Collection: School Climate and Safety, p.13. Retrieved from <https://www2.ed.gov>

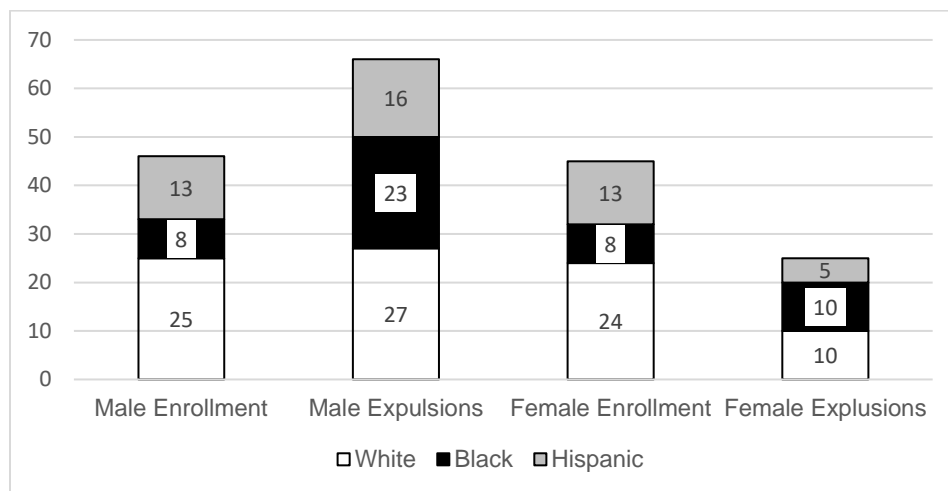


Figure 2. United States Public schools’ percentage distribution of expulsions. Expulsions in the 2015-2016 school year compared to the percentage of enrollment for Black, Hispanic, and White males and females. Adapted from “Percentage distribution of students receiving expulsions, by race and sex, by United States Department of Education, 2018, 2015-2016 Civil Rights Data Collection: School Climate and Safety, p.15. Retrieved from <https://www2.ed.gov>

peers (Blake, Gregory, James, & Hasan, 2016; Girvan et al., 2017). Inequity in discipline rates increases in ambiguous categories of discipline, such as insubordination, where bias is likely to affect decisions (Blake et al., 2016; Girvan et al., 2017).

Not all researchers have consistently uncovered discipline gaps for students of color (Goplan & Nelson, 2019). One study with inconsistent outcomes (Goplan & Nelson, 2019) found Black-White discipline gaps were present as early as preschool and increased with age, the gap attenuated by almost half when controlling for many student-level and school-level characteristics, but the gaps persisted within districts and schools. In contrast, the findings of the same study found Hispanic-White gaps were initially null and statistically insignificant in preschool and attenuated substantially after adjustment for school and district variables (Goplan & Nelson, 2019).

Causes. Researchers have explored multiple potential causes of the discipline gap, including implicit bias, poor classroom management, lack of cultural understanding, and lack of culturally responsive instruction (Blake et al., 2016). In keeping with critical race theory, narratives of White innocence and Latino criminality were found to lead to more frequent surveillance, greater contact with law enforcement, and overrepresentation in school discipline (Gray, 2016). Morrison and Skiba (2001) suggested discipline disproportionality was due not only to discrimination, but to a complex interaction between environmental features, the type of infraction, and student characteristics. In schools with diverse populations, students of color may display behaviors that align with norms of the home culture, but which may be viewed less favorably by educators than behavior exhibited by students from the majority group (Joseph et al., 2016). When interactions at school escalate beyond the educator's classroom management skills and cultural understanding, the likelihood of disciplinary action increases, placing students of color at risk for a variety of additional adverse academic and disciplinary consequences (Skiba, Ormiston, Martinez, & Cummings, 2016). Disproportionality can then result from a transactional process between students and educators in which teachers' biases ignite a cycle of disproportionate discipline, which feeds students' non-compliance and reinforces teacher biases (Okonofua, Walton, & Eberhardt, 2016).

Expert opinions on the extent to which racial bias is a cause of discipline inequity are mixed (Steinberg, Allensworth, & Johnson, 2011; Steinberg & Laco, 2017; Steinberg, Ukert, & MacDonald, 2019). Steinberg and Laco (2017) suggested factors related to economic inequality, such as trauma and crime, drove discipline rates for racial minority students. Schools in Chicago in low-poverty areas were found to be safer than schools in areas with high crime rates and high

poverty rates (Steinberg et al., 2011). Contrarily, the closing of chronically underperforming schools resulted in a reduction in neighborhood crime (Steinberg et al., 2019).

Leadership. The responsibility of school leaders is to acknowledge racism and marginalization, to build authentic connections with marginalized populations, and to interrogate past practices and policies to build more equitable systems for the future (DeMatthews, 2016). Policymakers are beginning to recognize the damage caused to communities of color from zero-tolerance policies (Blake et al., 2016; Fergus & Bradshaw, 2018; Gregory et al., 2016a). Policy reforms, primarily at the state level, tend to focus on quality and efficiency. Quality includes instructional time, rehabilitative discipline, and age-appropriate interventions (Fergus & Bradshaw, 2018). Efficiency implies educators use effective behavioral interventions at a suitable and effective level (Fergus & Bradshaw, 2018). Data on overuse, patterns of repeat offenders, and disparity among subgroups highlights the ineffectiveness of suspensions (Fergus & Bradshaw, 2018).

Policy shifts based on quality and efficiency can leave room for school leaders to consider higher quality and more effective approaches for addressing student behavior than exclusionary discipline (Fergus & Bradshaw, 2018). In a study of principals' perspectives regarding disciplinary practices, some principals described enacting harsh punishment to establish neutrality, consistency, or colorblindness. Other principals described resisting institutional racism, challenging the status quo, and engaging in disciplinary approaches that emphasized prevention and education (DeMatthews, Carey, Olivarez, & Moussavi Saeedi, 2017). Implicit bias among school leaders remains a factor in the perpetuation of racism in education systems.

Predictors. Predictors of disparity in school discipline can supply insight for prevention efforts (Anyon, Zhang, & Hazel, 2016; Blake et al., 2016). Teachers with high office discipline referral rates were found to have higher referral rates earlier in the year than lower-referring peers and higher office discipline referral rates for Black and Hispanic students than for White students (Blake et al., 2016), suggesting the identification of and intervention with high referring teachers may reduce the discipline gap. A student factor predictive of disproportionate school discipline is connectedness (Anyon et al., 2016). Students of color were significantly less likely to feel connected to school adults than White students, and the discipline gap was significantly negatively associated with connectedness for all students (Anyon et al., 2016). As connectedness decreases, discipline increases, and students of color are more likely to feel less connection. The findings warranted further research on the relationship between social-emotional learning and school discipline.

In studying the use of threat assessment protocols to determine school discipline, Cornell et al. (2018) found the most consistent predictors of disciplinary consequences were student possession of a weapon and team classification of a serious threat. No disparities among Black, Hispanic, and White students in OSS, school transfers, or legal action were discovered. The authors cautiously suggested the threat assessment process may be a pathway for achieving parity in school discipline.

Prevention. Gregory et al. (2016a) stated, “[r]educing unnecessary or unequal discipline requires transforming instruction and school practice overall to promote all students’ academic, social-emotional, and behavioral development” (p. 9). Shifting away from punitive discipline and toward preventive approaches includes setting clear expectations, engaging curriculum, positive

acknowledgment, relationship building between students and teachers, and culturally responsive classroom management (Gregory et al., 2016a; Skiba et al., 2016). While much of the research on the impact of culturally responsive teaching practices on student behavior is inconclusive, a significant relationship existed between observations of culturally responsive teaching, proactive behavior management, and positive student behaviors (Larson et al., 2018). Instructional strategies included connecting lessons to real-world examples, integrating cultural artifacts reflective of students' interests, storytelling or sharing, teacher use of positive humor to engage students or defuse tension, giving students opportunities to lead learning, giving direct commands, and employing rhythm or "call and response" strategies (Larson et al., 2018). Providing educators with strategies to neutralize the effects of implicit bias may be a promising practice for preventing discipline inequity in schools (Girvan et al., 2017).

Intervention. Studies on interventions aimed at closing the racial discipline gap have produced mixed results. Restorative practices have been the subject of much research in recent years (Gregory et al., 2018; Mansfield et al., 2018). Restorative practices encompass positive social and behavioral support approaches that foster communication, mutual respect, and understanding by bringing educators and students together in the school setting for solution-focused goal-setting and mutual resolution (Mansfield et al., 2018).

In a study of one high school's implementation of three tiers of restorative practices, the discipline gap narrowed but did not close (Mansfield et al., 2018). In another study (Gregory et al., 2018), participation in restorative practices significantly reduced the likelihood of individual students receiving OSS, but participation was only slightly associated with the more comparable assignment of OSS to Black students relative to White peers. These findings suggest restorative

practices may yield benefits for all student groups, but do not generate significant improvement in disparities in suspension rates between Black and White students (Gregory et al., 2018). Like the studies on restorative practices, a self-affirmation intervention appeared to have some positive effect on the treatment group, but little practical significance in closing the discipline gap (Schmidt & Canela, 2015).

Interventions that include changes in teacher practice in the classroom demonstrated more consistently positive outcomes in closing the discipline gap than interventions that occurred outside the classroom (Cook et al., 2018; Gregory et al., 2016b). The Greet-Stop-Prompt (GSP) intervention (Cook et al., 2018) uses three core components to mitigate the causes of exclusionary discipline decisions, including proactive classroom management, self-regulation to mitigate the impact of teacher biases on the response to problem behavior, and strategies to increase empathetic, consistent, and appropriate responses to problem behavior. Following the implementation of the GSP intervention, the likelihood of Black male students receiving an office discipline referral was reduced by two thirds, and Black male students' self-reported school connectedness significantly improved from pre-intervention to post-intervention.

An intervention in which teachers were coached on emotional support, classroom organization, and instructional support resulted in no significant discipline disparities between Black students and other members of the treatment group, and a continued discipline gap for the control group (Gregory et al., 2016b). The researchers determined a low probability of receiving disciplinary referrals for Black students with teachers whose ability to engage students in high-level analysis and inquiry increased. Overall, the findings suggested teacher awareness and

competence played an influential role in overcoming disparities in school discipline for students of color.

Multi-Tiered Systems of Support

Multi-tiered systems of support is a framework for addressing students' academic, behavioral, and affective needs in school by identifying the needs, placing students in tiered interventions based on the severity of need, and routinely monitoring progress to determine the effectiveness of the intervention (Ziomek-Daigle et al., 2016). Interventions are monitored and adjusted until the student has closed the gap in the expected learning or performance (Ziomek-Daigle et al., 2016). Multi-tiered systems of support is an umbrella term for a variety of school-wide approaches to improving student learning and behavior, which broadly includes Positive Behavior Interventions and Supports (PBIS) as well as Response to Intervention (RTI), schoolwide problem-solving frameworks which have addressed students' behavioral and academic needs respectively (Sink & Ockerman, 2016; Utley & Obiakor, 2015). The PBIS and RTI models each emphasize prevention, data-driven decisions, problem-solving, and research-based interventions, providing the theoretical basis for merging the two frameworks into one MTSS model which interweaves initiatives to address the academic, behavioral, and social-emotional needs of all students (Eagle, Dowd-Eagle, Snyder, & Holtzman, 2015; Mellard, 2017). Multi-tiered systems of support incorporate a broad focus on academic and social-emotional matters, allowing for a greater understanding of how social-emotional factors impact academic achievement (Harrington, Griffith, Gray, & Greenspan, 2016).

Multi-tiered systems of support is an effective and efficient approach to improving students' academic and behavioral experience in schools (Sugai, Simonsen, Bradshaw, Horner,

& Lewis, 2014). Many schools operate within an MTSS framework and expect new teachers to understand teachers' roles and responsibilities within the framework (Lancaster & Hougen, 2017). Preservice teachers who participated in an MTSS residency program outperformed other new teachers and other veteran teachers on the district implementation evaluation (Ross & Lignugaris-Kraft, 2015). When educators systemically collected and used data for identification of need and implementation of interventions, the likelihood of positive student outcomes increased (Fuchs, Fuchs, & Compton, 2012).

Reynolds and Shaywitz (2009) argued MTSS and related frameworks, such as RTI, operated as a wait-to-fail model, delaying assessments for special education eligibility with lengthy processes of intervention and progress monitoring. A longitudinal study (Harn, Basaraba, Chard, & Fritz, 2015) attempted to use MTSS to prevent severe reading difficulties by offering intensive academic and behavioral supports. Of the eleven students who still required intensive reading interventions at the end of third grade, all of the students had been on a behavior support plan at some point during the study, and five of the students were still on a behavior plan when the study concluded (Harn et al., 2015). School-wide problem-solving systems are multifaceted, causing difficulty for researchers in determining which aspects of a system have causal implications for student performance (Kovaleski & Black, 2010).

Blending MTSS and SEL. Social-emotional learning is “a process for helping children and adults develop the fundamental skills for life effectiveness” (CASEL, 2007, p. 1). Social-emotional learning addresses improvements in social and emotional skills, attitudes towards self and others, positive behavior, reducing conduct and emotional problems, and improving academic performance (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Additional

researchers have advocated for the incorporation of mental health services in schools (McGee & Stovall, 2015; von der Embse, 2018) due to schools' proximity to social-emotional learning prevention services (von der Embse, 2018) and the ability of mental health services to mediate educational consequences. A recent trend in the literature has advocated on behalf of blending the comprehensive school counseling model with school-wide improvement frameworks as a strategy for meeting all students' social-emotional learning needs (Belser et al., 2016; Goodman-Scott et al., 2016; Olsen et al., 2016; Sink, 2016; Ziomek-Daigle et al., 2016). Similarities between the two models include a commitment to collaboration and coordination of services, efficient use of the counselor's time, data-driven decision-making, evidence-based and culturally responsive interventions, promoting prevention, facilitating systemic change, and a positive school climate (Belser et al., 2016; Goodman-Scott et al., 2016; Ziomek-Daigle et al., 2016).

Empirical research on the blending of MTSS and social-emotional learning has not produced consistent findings. Many researchers have found the blending of MTSS and social-emotional learning can support positive outcomes for all students (Adelman & Taylor, 2010; Barnett, 2019; CASEL, 2018; Saeki et al., 2011). The Collaborative for Academic, Social, and Emotional Learning (2018) confirmed the research-based link between social-emotional learning and academic and behavioral outcomes. While Adelman and Taylor (2010) espoused how social-emotional learning initiatives at the school level consistently demonstrated effectiveness across settings, the following year Saeki et al. (2011) stated the long-term impact of MTSS on social-emotional learning remained equivocal, though the researchers found an effect size of .64 when implementing social-emotional learning within an RTI framework.

MTSS, social-emotional learning, and equity. Alignment of MTSS and school counseling efforts present an opportunity for schools to promote equitable academic and social-emotional learning outcomes for all students by advancing culturally responsive interventions which serve students and families more effectively (Bohanon, Gilman, Parker, Amell, & Sortino, 2016; Goodman-Scott et al., 2016; Sink & Ockerman, 2016). Aligning the comprehensive school counseling model with MTSS provides a viable framework for reducing school discipline for students of color by employing data-driven, culturally responsive social-emotional learning strategies that foster safe and inclusive school environments while creating alternatives to suspension and expulsion (Belser et al., 2016). Multi-tiered systems of support are considered a best practice for implementing culturally responsive behavior supports in schools, which can reduce marginalization and foster a safe and supportive school climate for racial minority students (Banks & Obiakor, 2015). More research quantifying the results of efforts using social-emotional learning strategies within an MTSS framework to close the discipline gap has been needed.

Implementation science and MTSS leadership. The complexity of MTSS results in problems associated with implementation (Arden & Benz, 2018; Eagle et al., 2015; Wilson & Duda, 2018), perhaps explaining mixed results in the literature. Research findings on MTSS often do not transfer to sustainable outcomes for students, likely due to the lack of a systematic approach to the implementation of change (Wilson & Duda, 2018). Implementing a complex framework such as MTSS requires thoughtful practice, behavior change, embedded support, and a focus on fidelity (Arden & Benz, 2018). Implementation science is a framework for thinking

about organizational change and bridging the gap between research and practice in education (Eagle et al., 2015).

Implementation science identifies the changes necessary in a system that allow implementers to successfully use a selected program or apply innovation with fidelity (Duda & Wilson, 2018). In the implementation science model, effective interventions combined with effective implementation methods and an enabling context lead to the intended outcomes. Implementing MTSS at the district level requires an enabling context that includes layered training, technology resources, and facilitation of the stages of implementation science (Duda & Wilson, 2018). The four stages of implementation science are exploration, installation, initial implementation, and full implementation, which progress through competency drivers, organization drivers, and leadership drivers (Arden & Benz, 2018; Bohanon et al., 2016; Eagle et al., 2015; Freeman, Miller, & Newcomer, 2015). Bohanon et al. (2016) and Eagle et al. (2015) included two additional stages: innovation and sustainability.

Leadership drivers are adaptive and technical (Eagle et al., 2015). Technical leadership uses established procedures to respond to straightforward issues, while adaptive leadership involves guiding others through complex changes and uncertainty related to motivation, consensus building, and changing roles (Eagle et al., 2015). Leadership practice in the implementation of MTSS includes recognizing the complexity of implementation, the use of data-based decisions, interdisciplinary cooperation, and the need for ongoing technical development (Forman & Crystal, 2015). Critical leadership behaviors in the use of implementation science for MTSS success include the selection of efficacious interventions that

fit the purpose and context, development of stakeholder support, implementer competency, a supportive organizational context, and external systems support (Forman & Crystal, 2015).

If MTSS is to result in equitable academic and behavioral outcomes for students of color, the use of implementation science protocols can ensure effective implementation of the MTSS framework (Forman & Crystal, 2015). In a case study using implementation science to develop an MTSS framework in a school, the stages of implementation science were not necessarily sequential but did supply a framework for understanding how the school moved through the stages (Bohanon et al., 2016). A recurring theme throughout each stage was staff development and a sense of urgency for change (Bohanon et al., 2016). An urgency for change is a recurring theme in MTSS, critical race theory, and transformational leadership theory.

Universal Screening

In the MTSS model, schools identify students' needs, place students in tiered interventions based on the severity of the need, and monitor progress to determine the effectiveness of the intervention (Ziomek-Daigle et al., 2016). Educators make data-based decisions using universal screening and progress monitoring (Ziomek-Daigle et al., 2016). Within the MTSS framework, the earliest point of data collection is at the time of universal screening (Ziomek-Daigle et al., 2016). Universal screening is the process of collecting baseline data on all students who are then grouped into tiers of intervention based on risk level (Belser et al., 2016). Universal screeners are brief assessments of targeted skills and are administered to all students in a school to identify students at risk for academic or behavioral challenges (Arden & Pentimonti, 2017). Universal screener results are evaluated against normative or criterion-referenced cut points and used to estimate students' risk status (Mellard, 2017). Universal

screening data identifies students at risk for poor learning outcomes and students who need further diagnostic assessment. Universal screening supplies data on the effectiveness of an academic and social-emotional learning curriculum (Pentimonti et al., 2017). Early identification of a student's risk can prevent the escalation of maladaptive social-emotional and behavioral functioning (Saeki et al., 2011).

Universal screeners share common features and benefits. Screeners target skills appropriate to the grade level, indicate overall functioning in an area, are quick and efficient to administer, and are reliable and valid tools (Pentimonti et al., 2017). Commonly used universal screeners have demonstrated various advantages, such as predictive validity, over subjective methods of risk identification (Jenkins et al., 2014; Naser et al., 2018), the ability to detect a full range of emotional and behavioral problems, and expanding opportunities for prevention (Splett et al., 2018). Universal screening through parent report has successfully predicted which students are likely to struggle academically, socially, and behaviorally in kindergarten (Owens et al., 2015).

Among the most common valid and reliable screeners for social-emotional and behavioral risk are the Behavioral and Emotional Screening System (BESS) (Kamphaus & Reynolds, 2007), Behavior Assessment System for Children (BASC) (Reynolds & Kamphaus, 2005), the Systematic Screening for Behavior Disorders (SSBD) (Cheney, Flower, & Templeton, 2008), and the Social Skills Rating System (SSRS) (Gresham & Elliot, 1990). The choice of a social-emotional screening tool depends on the needs and resources of the school, as one social-emotional learning measure cannot meet the needs of every school (Jenkins et al., 2014). When choosing a social-emotional learning universal screener, Jenkins et al. (2014) advise educators to

look for instruments that balance the efficiency of resources with the information obtained. The Panorama Social-Emotional Learning Survey (Panorama Education, 2016a), first released in 2014, has not been subject to the same level of scrutiny in the literature as other well-established instruments, and no research had been published on the use of the Panorama Social-Emotional Learning Survey as a universal screener in the context of MTSS or the racial discipline gap.

Counter to the advantages and promise of universal screening highlighted in the research, challenges and risks are associated with the use of such instruments for students, families, and schools (Jenkins et al., 2014; Owens et al., 2015; Splett et al., 2018). Difficulties arise when assigning risk status at an age when variation in behavior is developmentally normal (Owens et al., 2015). False-positive cases lead to unnecessary emotional and financial distress for families and ineffective distribution of resources for schools (Owens et al., 2015). When universal screeners produce false-negative results, some students remain undetected (Owens et al., 2015). The reasons many schools have opted not to use a standardized universal screener include fear of inability to respond to the volume of identified needs (Splett et al., 2018) and difficulty in identifying sound, affordable, brief instruments (Jenkins et al., 2014). The use of universal screening in identifying students' social-emotional learning needs requires care and caution on the part of the educator.

Universal screening and the discipline gap. Closing the racial discipline gap requires leaders to confront influencing factors resulting in inequitable outcomes for disenfranchised students (DeMatthews, 2016). The disaggregation of universal screener data by racial identity is a promising approach for educators to identify opportunities to disrupt the school discipline cycle for racially and ethnically diverse students (Blake et al., 2016). Of the few schools which

systematically screened for social-emotional learning risk, most relied on subjective referral systems, such as office discipline referrals (Naser et al., 2018). Though office discipline referrals communicate valuable information about students' social-emotional learning competencies (Harrington et al., 2016), office discipline referrals are subject to bias and linked to inequity in school discipline practices (Naser et al., 2018). In one case study, social-emotional learning universal screener data informed the staff's identification of alternatives to suspension for students at risk for exclusionary discipline (Bohanon et al., 2016), but the findings did not distinguish whether such efforts impacted the discipline gap. Universal screening supplies an opportunity for school psychologists to address inequity in school discipline for students of color (Albritton, Anhalt, & Terry, 2016). One study of psychologists using universal screening in the school setting (Donovan et al., 2015) demonstrated the positive impact of universal screening on school climate and student behavior in early childhood education, but the researchers fell short of linking universal screening to closing the discipline gap.

Chapter Summary

Racism is an embedded part of the education system, leading to inequitable outcomes for students of color (Ladson-Billings & Tate, 1995). Racism is apparent in the education system through the implicit bias of educators, which manifests as colorblindness, microaggression (Carter et al., 2017), and meritocracy (Capper, 2015). One result of racism in the education system is the racial discipline gap, where Black and Hispanic students are more likely than White counterparts to receive more frequent and harsher exclusionary school discipline consequences starting as early as preschool (Blake et al., 2016; Girvan et al., 2017; Goplan & Nelson, 2019; United States Department of Education, 2016; United States Department of Education, 2018a).

Multi-tiered systems of support is a framework for addressing students' academic, behavioral, and affective needs in school by identifying the needs, placing students in tiered interventions based on the severity of need, and routinely monitoring progress to determine the effectiveness of the intervention (Ziomek-Daigle et al., 2016). The blending of MTSS and school counseling frameworks presents a promising opportunity to identify and address the social-emotional learning needs of students through cultural responsiveness (Bohanon et al., 2016; Goodman-Scott et al., 2016; Sink & Ockerman, 2016). Because MTSS is complex, implementation with fidelity is difficult (Wilson & Duda, 2018), but with effective leadership, meaningful improvement in student outcomes is possible. The disaggregation of universal screener data by racial identity can assist educators in identifying opportunities to close the discipline gap for racially and ethnically diverse students (Blake et al., 2016).

While quantitative studies support the impact of racism in education, primarily through correlational studies, quantitative research has not yet caught up to the theoretical models and advocacy for the use of MTSS frameworks to address the social-emotional learning needs of students of color to close the discipline gap. In a study of universal screening to find students at risk for mental health concerns, a strong relationship was identified between student data collected from teachers regarding mental health risk and behavioral outcomes (von der Embse, 2018). Recommendations for future research included the study of alternative raters and alternative rating formats with the same student population (von der Embse, 2018). Consistent with critical race theory, the present study included students as raters, which could provide a comparative criterion to teacher ratings with the same population using the same screener.

Gaps in the literature persisted in culturally responsive adaptations to the use of universal screeners, particularly in the use of universal screener data to inform efforts to close the discipline gap for students of color. While Cook et al. (2018) found preliminary evidence of success in aligning intervention strategies with root causes in closing the discipline gap for Black males, the study was unable to discern which components influenced the positive findings. Cook et al. (2018) recommended for future research to focus on different malleable factors and the impact on social-emotional learning. No known research existed linking the Panorama Social-Emotional Learning Survey with racial inequity in school discipline.

The literature review analyzed and synthesized a multitude of peer-reviewed studies advocating for further research into practices to address the discipline gap and proposing integrated models, supported primarily by case studies. The complexity of MTSS makes a quantitative study of the topic challenging, perpetuating a gap in empirical research. Through the lens of transformational leadership theory and critical race theory, the study informed educators' efforts to use social-emotional learning universal screener data to close the discipline gap for students of color using comparative and relational methods.

Well-written methodology chapters link the contents of the review of the literature to the components of methodology (James & Slater, 2014). The methodology chapter demonstrates alignment among gaps in the literature identified in the research literature review and the research questions, hypotheses, and design. The methodology sections detail procedures including identification of the population, methods for sample selection, design and use of instrumentation, data collection, preparation, and analysis, methods to ensure validity and

reliability, and attention to ethical considerations for a comparative, relational study of social-emotional learning universal screener data and school discipline by race.

Chapter 3: Methodology

The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado. The study used comparative and relational quantitative methods. Quantitative research tests objective hypotheses by measuring relationships between variables using numbered data and statistical procedures (Creswell & Creswell, 2018). Quantitative methods are conducted systematically to enable researchers to perform statistical tests based on strict assumptions (Hagan, 2014). The following research questions addressed the purpose of the study:

Research Question One: What were the statistically significant differences, if any, in the frequency of in-school suspension, out-of-school suspension, and expulsion for Black, Hispanic, and White students in an urban school district in Colorado?

Research Question Two: What were the statistically significant differences, if any, in social-emotional learning universal screener scores for Black, Hispanic, and White students in an urban school district in Colorado?

Research Question Three: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for Black students in an urban school district in Colorado?

Research Question Four: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of

school discipline for Hispanic students in an urban school district in Colorado?

Research Question Five: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for White students in an urban school district in Colorado?

A hypothesis is a prediction about an expected relationship between variables.

Quantitative hypotheses are estimates of numeric population values based on outcomes collected from a sample (Creswell & Creswell, 2018). The following hypotheses were predictions related to the research questions:

H1₀: No statistically significant difference existed in the frequency of in-school suspension, out-of-school suspension, and expulsion among Black, Hispanic, and White students.

H1_a: The frequency of in-school suspension, out-of-school suspension, and expulsion among the three groups were not equal.

H2₀: No statistically significant difference existed in students' social-emotional learning universal screener scores among Black, Hispanic, and White students.

H2_a: Social-emotional learning scores among the three groups were not equal.

H3₀: No statistically significant relationships existed between social-emotional learning universal screener scales and the type of school discipline for Black students.

H3_a: At least one statistically significant relationship existed between social-emotional learning universal screener scales and the type of school discipline for Black students.

H4₀: No statistically significant relationships existed between social-emotional learning

universal screener scores and the frequency of school discipline for Hispanic students.

H4_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for Hispanic students.

H5₀: No statistically significant relationships existed between social-emotional learning universal screener scores and the frequency of school discipline for White students.

H5_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for White students.

Quantitative methodology aligned with the purpose, research questions, and hypotheses aimed at identifying differences in outcomes and relationships between the frequency of student discipline and scores on a standardized social-emotional learning universal screener. The research questions and hypotheses, research methods, research design, and rationale for these decisions are described in the methodology chapter. Upcoming sections detail procedures including identification of the population, methods for sample selection, design and use of instrumentation, data collection, preparation, and analysis, methods to ensure validity and reliability, and attention to ethical considerations.

Research Design and Rationale

A comparative and relational design was used for the analysis of student discipline data and social-emotional learning universal screener data by racial identity. All data analysis was conducted using Excel software (Microsoft Corporation, 2019) and the Statistical Package for

Social Sciences (SPSS; SPSS Statistics for Windows 25.0, 2017). Quantitative, comparative significance testing included the Kruskal-Wallis H-test, which is the test used for the simultaneous comparison of differences among more than two groups when the data do not meet the requirements for parametric testing (Belhekar, 2016c). Kruskal-Wallis analysis of variance was used to test the difference between three independent samples with a skewed distribution (Salkind, 2007). Post hoc testing to identify differences between two groups when the Kruskal-Willis test identified results of significance included the non-parametric Mann-Whitney *U*-test (Salkind, 2007). Unlike the parametric *t*-test, which relies on a normal distribution, the Mann-Whitney *U*-test preserved the Type I error rate to nominal alpha with a skewed population distribution (Salkind, 2007).

The Pearson Chi Square test is a non-parametric significance test of the relationship between categorical variables. The test measures the likelihood of an observed distribution occurring due to chance (Salkind, 2007). The test answered whether an association in the sample justified the conclusion of an association in the population ($\alpha = .05$) (Salkind, 2007). The categorical variables in the study were school discipline frequencies and social-emotional learning scores.

An independent variable is not subject to the impact of other influences, but a dependent variable changes based on the influence of the independent variable (Creswell & Creswell, 2018). The independent variable was racial identity, categorized as Black, Hispanic, and White, consistent with the coding used in the data collection instruments. The dependent variables were the frequency of school discipline, social-emotional learning screener scores on the Panorama Social-Emotional Learning Survey, and the relationships between these two variables.

School discipline in the study included categories of in-school suspension (ISS), out-of-school suspension (OSS), and expulsion. Social-emotional learning screener scales and scores on the Panorama Social-Emotional Learning Survey were categorized as compassion, emotion regulation, engagement, grit, learning strategies, self-efficacy, self-management, sense of belonging, and social awareness (see Appendix A) (Panorama Education, 2016c). Panorama Education derived the scales from the essential domains of social-emotional well-being identified in a seminal meta-analysis by CASEL. Panorama Education provides permission for educators to freely use the Panorama Social-Emotional Learning Survey free of charge under the condition of citing the survey as the “Panorama Social-Emotional Learning Survey” created by Panorama Education (Durlak et al., 2011; Panorama Education, 2016c).

The statistical methods aligned with the research question, design, and data collection methods (Skoczylas, 2019). Comparative statistical tests described differences among the three racial identity groups in the frequency of discipline and social-emotional learning scores. The tests were to answer research questions one and two. Relational tests were used to examine the relationships between the frequency of student discipline and scores on the Panorama Social-Emotional Learning Survey to answer research questions three, four, and five, which postulated whether relationships existed between the frequency of student discipline and social-emotional learning scores for each racial identity group. Comparative and relational designs are common in research on student discipline and social-emotional learning. In establishing validity for the Panorama Social-Emotional Learning Survey tool, pilot studies established correlations between the social-emotional learning measures and variables such as grade point average, absences, tardiness, behavior referrals, grade level, gender, and economic status (Panorama Education,

2016b). The research contributed to the literature by studying the differences in student discipline and Panorama Social-Emotional Learning Survey scores by racial identity for the previously unstudied population of third-grade to fifth-grade students in an urban school district in Colorado and the previously unstudied relationship between Panorama Social-Emotional Learning Survey scores and student discipline by racial identity.

Research Procedures

Research procedures included population and sample selection, description of instrumentation, issues pertaining to the use of archival data, data collection procedures, and data preparation. Clearly defining the population of a study and rigor in sample selection (Eldredge, Weagel, & Kroth, 2014), sample recruitment and data collection helped ensure the validity of results and served as the basis for generalizing results to the population (Suhonen, Stolt, Katajisto, & Leino-Kilpi, 2015). The following sections describe each of the research procedures, which contributed to the credibility of the study.

Population and Sample Selection

In well-designed research involving human participants, the population is clearly described with standardized, commonly understood definitions of groups to set criteria for eligibility in the study (Eldredge et al., 2014). The target population consisted of Black, Hispanic, and White students enrolled for the 2017-2018 school year in six elementary schools in an urban school district in Colorado and who took the Panorama Social-Emotional Learning Survey in the fall of 2018. The definition of exclusion criteria provides clarity about the rationale for exclusion with the research design as the guiding principle (Eldredge et al., 2014). Students who identified as two or more races and students who identified as a race other than Black,

Hispanic, or White were excluded from the population. The confidentiality of additional student racial groups of color, such as Native Americans and Pacific Islanders, could not be guaranteed due to low representation within the population, and the students who identified as two or more races could not be placed into independent groups by racial identity.

A total of 877 students completed the Panorama Social-Emotional Learning Survey, administered by the school district in the fall of 2018 for the survey's original purpose of collecting social-emotional learning universal screener data for educational use. Parental permission was not required for the school district to administer the survey, as the assessment was considered normal educational practice. Such data sets qualify for exemption under 45 C.F.R. § 46.101.b(4) (United States Department of Health and Human Services, 2018b).

A sample frame is a list of all people in the population who have a chance of being selected into a sample (Fowler, 2014). The sample frame for the study merged district enrollment data for the 2017-2018 school year, student racial identity, and Panorama Social-Emotional Learning Survey rosters into a spreadsheet. Entries were eliminated that did not meet population criteria for enrollment during the 2017-2018 school year, survey completion in the fall of 2018, and racial identity as Black, Hispanic, or White. Enrollment and racial identity data were extracted from the district student information database, called the Q database (Aqitas Solutions, 2019). Panorama Social-Emotional Learning Survey rosters were accessed in the Panorama Education online platform (2016a). The final sample frame consisted of 626 respondents.

The population was stratified by racial identity before modified random sample selection. Stratified random sampling involves splitting the population into subgroups according to a

specific characteristic then taking random samples for each group of a pre-determined size in proportion to the representation of the characteristic in the larger population (Kandola, Banner, O’Keefe-McCarthy, & Jassal, 2014). Stratified samples can produce a lower rate of sampling error than simple random samples when rates of selection are consistent across strata (Fowler, 2014). Simple random sampling is akin to drawing a number out of a hat (Fowler, 2014), in which each member of the population has an equal chance of being selected (Creswell & Creswell, 2018).

Fowler (2014) recommends an analysis plan for calculating sample size. The analysis plan consisted of an outline of the subgroups within the population and an estimate of the proportion of the population which fell into each group. The minimally adequate sample for the smallest subgroups was then estimated as $n = 20$ by referencing the low end of the sample size continuum and considering the minimum group size required to maintain confidentiality (Fowler, 2014). Panorama Social-Emotional Learning Survey completion data served to inform population and sample sizes. A total of 877 Black, Hispanic, and White students completed the Panorama Social-Emotional Learning Survey in the fall of 2018. Black participants made up 11% of respondents for an $n = 70$, Hispanic participants made up 42% of respondents for an $n = 262$, and White participants were 46% of the respondents for an $n = 287$.

The population was stratified into subgroups according to race. All incidents of school discipline were included, due to low discipline frequency for all groups. Additional sample participants were randomly chosen for the Hispanic and White groups resulting in 3 equal sample sizes of $n = 70$. The result was three racial identity groups equal to the size of the Black group, which was the smallest of the three groups. All groups were representative of the

population by grade and gender, and all incidents of school discipline were represented.

Stratified samples can produce a lower rate of sampling error than simple random samples when rates of selection are consistent across strata (Fowler, 2014). The time required to develop the sample frame and select the sample was one week.

Research activities in which human participants are involved in educational testing, in which researchers protect the identities of participants, and which do not place participants at risk of harm are exempt according to 45 C.F.R. § 46 (United States Department of Health and Human Services, 2018b). In such cases, documentation is provided to determine whether the research activities meet these standards (Fowler, 2014). The Panorama Social-Emotional Learning Survey is attached as Appendix B as evidence of the criteria for the exemption is met. As the study made use of archival data, direct contact with human participants did not occur in the course of the study.

In educational settings, the educational institution may supply anonymized data from educational records for normal educational practice. Such data sets qualify for exemption under 45 C.F.R. § 46.101.b(4) (United States Department of Health and Human Services, 2018b). Anonymous archival data does not require informed consent, though access to the data generally requires permission from the data owner (Rector and Visitors of the University of Virginia, 2019). A verbal request was made to the Executive Director of Education, Data, and Support Services to conduct research in the district. Appendix C is the letter in response to the verbal request granting permission to conduct research. Upon Institutional Review Board approval, a formal, written request was submitted via paper application to the urban school district in Colorado for access to anonymized archival data for normal educational practice, which did not

require informed consent. The district reserved the right to take up to six weeks to approve the application. The district official granted approval within eight days.

Instrumentation

The purpose of a survey is to produce data about certain aspects of a population under study by asking a sample the same set of questions (Fowler, 2014). Surveys are used to assess large populations with relative ease (Jones, Baxter, & Khanduja, 2013). Some information about people can only be obtained by directly asking individuals, particularly subjective information such as attitudes and perceptions (Fowler, 2014). Surveys answer descriptive questions, questions about relationships between variables, and questions about predictive relationships (Creswell & Creswell, 2018).

The survey data were collected using the Panorama Social-Emotional Learning Survey, which was administered to third-grade to fifth-grade students at six elementary schools in an urban school district in Colorado in the fall of 2018. The original purpose of the survey was to gather information regarding students' self-perceptions of social-emotional learning competencies and supports in the school environment. In the study, survey data supplied information regarding respondents' perceptions on nine scales of SEL.

The Panorama Social-Emotional Learning Survey (see Appendix B) developed by Panorama Education (2016a) measures student perceptions on up to 23 scales along with three overlapping domains: social relationships, motivation, and self-regulation. Two versions of the instrument exist, one for students in third-grade to fifth-grades and one for students in sixth-grade to twelfth-grade (Panorama Education, 2016c). Developers may create multiple versions of a social-emotional learning instrument for children to account for changes in how social-

emotional learning manifests with maturation (Ji, Flay, & DuBois, 2013). The survey, as administered by an urban school district in Colorado in the fall of 2018, posed a range of four to ten questions on each of nine scales identified as compassion, emotion regulation, engagement, grit, learning strategies, self-efficacy, self-management, sense of belonging, and social awareness to third-grade to fifth-grade students. Appendix A operationally defines each of the scales.

Each standardized question on the Panorama Social-Emotional Learning Survey was closed-ended on a 5-point Likert scale, with answers at the low end of the scale such as “Almost never,” “Very unfair,” and “Very negative,” and answers at the high end of the scale such as “almost all the time,” “Very fair,” and “Very positive.” Answers with scores of four and five were considered favorable, and answers below a score of four were considered unfavorable. Closed-ended questions are a preferable method of creating data because the respondent can readily answer questions when answers are provided, the meaning of answers can be easily interpreted, and the instrument can be administered on a computer (Fowler, 2014). Closed-ended questions result in a lower non-response rate, contributing to data validity (Zhou, Wang, Zhang, & Guo, 2017). Questions on a Likert scale produce ordinal strength data, which produces data in ordered categories along with a single criterion (Fowler, 2014). On the Panorama Social-Emotional Learning Survey, answers equivalent to the two answers at the highest end of the scale are considered favorable (Panorama Education, 2016c) and are reported to schools as “Percent Favorable,” which results in interval strength data, with meaningful intervals between values (Fowler, 2014).

Over 11,500 schools with over 9,000,000 students across the United States have used the Panorama Social-Emotional Learning Survey, including large urban school districts in New York

City, Dallas, Seattle, and San Francisco (Panorama Education, 2016c). Permission was not required to use the instrument, as the Panorama Social-Emotional Learning Survey is free of charge and available for download on the Panorama Education website with the stipulation of acknowledgment of Panorama Education as the instrument developer and publisher (Panorama Education, 2016c). The instrument was not administered to human participants during the study. The data, which were previously collected by an urban school district in Colorado, were used for the secondary, comparative, and relational purposes of the study.

Reliability is the extent to which measurements are replicable on separate occasions and under different conditions (Drost, 2011). The reliability of an instrument is calculated as a Chronbach alpha coefficient, which ranges from 0 to 1, with values between .70 and .90 representing optimal reliability (Creswell & Creswell, 2018). The Panorama Social-Emotional Learning Survey was reliable with an average Cronbach alpha value of .78 and a minimum coefficient of .68 (Panorama Education, 2016b).

Validity refers to how well an instrument measures the construct under study and whether the instrument can produce meaningful results (Creswell & Creswell, 2018). Factor analysis using Spearman correlations showed validity when the various social-emotional learning measures on the Panorama Social-Emotional Learning Survey correlated with each other as anticipated, with higher correlations for related scales (Panorama Education, 2016b). Intercorrelations were stable across districts and student populations with an average variability of .09 and stable across various demographics with an average variability of .05. Additional Panorama studies found correlations between various social-emotional learning measures and variables such as grade point average, absences, tardiness, behavior referrals, grade level, gender,

and economic status (Panorama Education, 2016b).

Procedures used to establish validity and reliability of the Panorama Social-Emotional Learning Survey aligned with those used to establish validity and reliability of similar instruments. The Middle Years Development Scale (MYDI) is a child self-report tool which, like the Panorama Social-Emotional Learning Survey, assesses social-emotional wellbeing based on the essential domains identified in the CASEL meta-analysis on the impact of enhancing social-emotional learning (Durlak et al., 2011; Thomson et al., 2018). The Social-Emotional and Character Development Scale (SECD) is a measure of social-emotional learning for elementary-age children (Ji et al., 2013). At the time of SECD's development in 2012, few instruments existed which measured social-emotional learning for young populations, and even fewer studies had established validity (Ji et al., 2013). The MYDI, SECD, and Panorama Social-Emotional Learning Survey measured similar constructs for a similar age group, and each instrument established validity through factor analysis (Ji et al., 2013; Panorama Education, 2016b; Thomson et al., 2018).

Archival Data

No intervention was implemented in the study during which archival data was analyzed for a secondary purpose and human subjects were not contacted. Archival data are information gathered and stored before the beginning of a study (Das, Jain, & Mishra, 2018). The advantages of archival data pertinent to the study were the ease of availability, low cost, and overcoming the logistical constraints of studying data generated by minors (Das et al., 2018). Racial identity data were originally collected during student registration and entered into the Q database by the school or district registrars for the purposes of generating local, state, and federal demographic

and educational outcome reports. Discipline data were originally entered into the Q database by school administrators at the time of disciplinary infractions. Panorama Social-Emotional Learning Survey data were initially collected to implement data-driven, social-emotional learning interventions targeted at improving students' social-emotional functioning and improving academic outcomes.

Archival data serve a performative function by bringing preserved information from the past back to life for a secondary purpose (Mauthner & Gárdos, 2015). Archival data were used for the secondary purpose of identifying differences in school discipline and social-emotional learning scores among Black, Hispanic, and White students and measuring the magnitude of relationships between school discipline and social-emotional learning scores for each of three racial identity groups. Access to the archival data involved submitting an application (see Appendix D; see Appendix E; see Appendix F; Colorado Springs School District 11, 2020) to the executive in charge of the district data support department for review and approval.

Data Collection

The quantitative, comparative, relational study required the collection of racial identity data, school discipline data, and student scores on the Panorama Social-Emotional Learning Survey for third-grade to fifth-grade students at six elementary schools in an urban school district in Colorado. Racial identity data was collected by school registrars in the school district in the study. As automation replaces manual data entry and paper forms, registrars' offices increasingly operate using information technology (Parks & Taylor, 2019). During the student enrollment process, either a parent or legal guardian entered enrollment information, including the student's racial identity, directly online with verification by the school registrar, or the school registrar

collected racial identity data on paper forms then manually entered the information into the online Q database student information database. The online Q database student information database generated a racial identity report for the population, which was exported into one Excel spreadsheet with discipline data by racial identity.

Identification of disproportionality in school discipline requires comparing discipline rates across racial and ethnic groups. Identification of disproportionality requires the consistent entry of office discipline referrals, school enrollment data by racial identity, and the capacity to disaggregate office discipline referrals by racial identity (McIntosh, Barnes, Eliason, & Morris, 2014). Office discipline referrals resulting in ISS and OSS were entered into the Q database by school administrators at the time of delivery of the disciplinary consequence with the ability to disaggregate data by racial identity. Data were collected on the frequency of the type of consequence, rather than the length of the consequence. Data were collected as the number of incidents of ISS and OSS for each student in the population. Student discipline frequency data was downloaded with racial identity data into a report generated by the Q database, and exported into an Excel spreadsheet, anonymized using a student numerical identifier.

Online surveys are preferred over paper surveys by younger and educated participants (Knoepke, 2017). Students completed the Panorama Social-Emotional Learning Survey in an online group administration setting. Panorama Social-Emotional Learning Survey data from the fall of 2018 were downloaded from the Panorama Education online platform. Panorama survey data were merged into one Excel spreadsheet, which was then merged with the student discipline and racial identity spreadsheet using the numerical student identifier common to the Q database. The data were sent as two spreadsheets that were merged upon receipt.

Data Preparation

Translating data into an analyzable form involves designing the code, coding, data entry, and data cleaning (Fowler, 2014). Coding of racial identity included codes of 3 = Black, 4 = Hispanic, and 5 = White. Codes for discipline data were a numerical frequency of discipline incidents in the categories of ISS and OSS. Panorama reported social-emotional learning data as interval level data in the form of mean scales scores with a range of 1-5. Questions were organized into the following categories: compassion, emotion regulation, engagement, grit, learning strategies, self-efficacy, self-management, sense of belonging, and social awareness. Racial identity data, discipline data, and Panorama Social-Emotional Learning Survey data were stratified in an Excel spreadsheet by racial identity.

Data cleaning criteria which exclude extreme values or identify measurement or data-entry errors are not standardized (Crowe, Seal, Grijalva-Eternod, & Kerac, 2014). Data cleaning included checking files for accuracy and completeness. Well-designed surveys tend to have low item non-response rates, resulting in little distortion to the results (Fowler, 2014). Analytic software often substitutes the average answer for the whole sample for missing answers (Fowler, 2014). The overall mean scale score for a survey question substituted for any missing answers.

United States Department of Health and Human Services (2018a) policy “Retention and Access Requirements for Records” (45 C.F.R. § 74.53) requires the retention of clinical research records for a period of three years. Data collection and preparation occurred electronically. All electronic data were stored on the researcher’s personal password-protected computer, and back-up files were stored in a personal password-protected cloud-storage account where the data will remain for three years. The timeframe for data collection and preparation was two weeks.

Data Analysis

The purpose of data analysis in the quantitative, comparative, relational study was to calculate significant differences in frequency of school discipline and Panorama Social-Emotional Learning Survey scores and to identify significant relationships between school discipline and survey scores for three racial identity groups. The analysis of data using a survey design method should include a comparative analysis of the independent and dependent variables and provide procedures and rationale for the choice of statistical testing of inferential hypotheses (Creswell & Creswell, 2018). The following section outlines the intended and final methods used to analyze the independent and dependent variables for each hypothesis.

Descriptive statistics provided a summary of the sample without drawing any inferences (Kuliyadan & Kulkarni, 2019). Descriptive analysis of the independent and dependent variables can include means and standard deviations (Creswell & Creswell, 2018). The independent variable in the study was racial identity, operationalized as Black, Hispanic, and White and was described in the text and in a bar chart and a pie chart (see Chapter 4 for detailed information) showing the frequency and percentage of participants in each category. The dependent variable of student discipline was described in the text and in a table outlining the mean and standard deviation of the frequency of ISS and OSS by racial identity (see Chapter 4 for detailed information). The dependent variable of Panorama Social-Emotional Learning Survey scores was described in the text and in a table supplying the mean and standard deviation for each of nine social-emotional learning categories by racial identity (see Chapter 4 for detailed information).

Models for comparison of more than two groups follow a hierarchical approach, in which

an omnibus test is performed, which tests the null hypothesis for no difference across groups (Chen, Xu, Tu, Wang, & Niu, 2018). If the test is not significant, the result is a failure to reject the null hypothesis (Chen et al., 2018). If the test determines significance, post hoc tests are performed to identify sources of the difference (Chen et al., 2018). Comparative, parametric tests assume a normal distribution, homogeneity of variance, truth of the null hypothesis, and random distribution (Belhekar, 2016a). When the data do not follow critical assumptions of normality of distribution to the extent allowable by robust testing, the choice was to use non-parametric tests (Belhekar, 2016c).

Research question one addressed differences in the frequency of in-school suspension, out-of-school suspension, and expulsion among Black, Hispanic, and White students. The frequency of ISS, OSS, and expulsion was determined by calculating the mean frequency for each type of discipline for each racial identity group. One-way ANOVA is the preferred test to measure differences among more than two independent groups, such as the groups in the study, which were stratified by race (Belhekar, 2016a). When the result of comparative testing is to reject the null hypothesis in favor of a difference existing among more than two groups, the post hoc testing identifies the groups between which a difference exists (Cardinal & Aitken, 2006). Because the frequency of student discipline was not normally distributed, the non-parametric Kruskal-Wallis H -test ($\alpha = .05$) and Mann-Whitney U -test using the Bonferroni correction ($\alpha = .0167$) were used to identify differences between groups. Kruskal-Wallis analysis of variance was used to test for differences between three independent samples with a skewed distribution (Salkind, 2007). Unlike the t -test, which relies on a normal distribution, the Mann-Whitney U -test preserved the Type I error rate to nominal alpha with a skewed population shape (Salkind,

2007).

To support comparability in test results, non-parametric tests were used to answer research question two. The second research question addressed differences in Panorama Social-Emotional Learning Survey scores among Black, Hispanic, and White students. The study tested for significant differences in means on nine social-emotional learning scales for three racial identity groups using the non-parametric Kruskal-Wallis *H*- test ($\alpha = .05$) and the post hoc Mann-Whitney *U*-test using the Bonferroni correction ($\alpha = .0167$).

The final three research questions addressed the relationships between student discipline and social-emotional learning scores for each of the three racial identity groups. The Pearson Product-Moment Correlation is the preferred test to identify a relationship between two variables (Belhekar, 2016b; Creswell & Creswell, 2018). Relationships between ISS, OSS, and the mean score on each of nine social-emotional learning scales by racial identity were determined using the Pearson Chi Square test because the data did not meet the assumption of a normal distribution. The Pearson Chi Square test is a significance test of the relationship between categorical variables (Salkind, 2007). The test answered whether an association in the sample between school discipline and social-emotional learning scores justified the conclusion of an association between the variables in the population (Salkind, 2007). All data analysis was conducted using Excel software and the Statistical Package for Social Sciences. The time to complete the data analysis was two weeks.

Reliability and Validity

Internal validity refers to procedures that threaten the researcher's ability to draw conclusions from the data (Creswell & Creswell, 2018). A threat to internal validity can result

from a sampling strategy (Speklé & Widener, 2018) when participants possess qualities that create a predisposition to certain outcomes (Creswell & Creswell, 2018). Sample selection in the study was managed with stratification, followed by modified simple random sampling to provide all characteristics of the population an equal probability of distribution among the sample groups. The cross-sectional design of the study controlled for other common threats to internal validity, such as history, maturation, and mortality (Creswell & Creswell, 2018).

The use of archival data potentially posed a threat to internal validity because the circumstances of the original data collection were not controllable. When the research is about core organizational variables, such as patterns, groups, and roles, archival data are not biased by comprehension, memories, or attitude of social desirability of answers when collected tacitly (Payne, Finch, & Tremble, 2003). Such findings would imply the original collection of racial identity data and discipline data did not pose a substantial threat to internal validity, as students were not aware of being studied at the time of data collection.

The collection of social-emotional learning data was not originally collected tacitly, as students were aware of being studied for the survey's original purpose, potentially leading to social desirability bias. Social desirability bias occurs when respondents alter responses in a direction consistent with social expectations. Multiple studies do not support social desirability as a biasing agent, but rather as an individual-level difference which can be controlled with random sampling (Speklé & Widener, 2018). Computer-based survey procedures have been found to elicit more truthful responses than paper surveys (Gnambs & Kaspar, 2015). Field experts' opinions favor online data collection over face-to-face survey methods for increasing validity and reliability because participants are more free, flexible, and independent in online

environments (Kılınç & Fırat, 2017). Even though the literature generally supports the unlikelihood of social desirability biasing statistical inferences, if high rates of motivation for deception are suspected, social desirability should be measured as a separate construct (Speklé & Widener, 2018).

Survey research and archival research are vulnerable to variables omitted from the research design which are correlated with both the independent and dependent variables (Speklé & Widener, 2018). Omitted variables can lead to an increase or decrease of bias in a study (Speklé & Widener, 2018). The use of factor analysis in establishing the validity of the Panorama Social-Emotional Learning Survey closely aligned with the development of other similar instruments with established validity and reliability, such as the SECD (Ji et al., 2013) and the MDI (Thomson et al., 2018). Using data from a valid instrument without modification decreases the opportunity for bias from omitted variables (Speklé & Widener, 2018). Control for threats from omitted variables in using archival Panorama Social-Emotional Learning Survey data involved refraining from adding or removing social-emotional learning variables from the study (Speklé & Widener, 2018).

External validity is the extent to which results can be generalized to a larger population. Threats to external validity can result in incorrect inferences about the population from the sample outcomes (Creswell & Creswell, 2018). Research with the goal of generalizability serves policymakers and researchers, but research that aims for generalizability often lacks the context necessary to be relevant to specific teaching and learning environments (Fendler, 2016). Due to the restrictive nature of inclusion criteria for the population under study, findings were only able to be generalized to the small population of six elementary schools.

Objectivity is an essential component of reputable research, though quantitative approaches are impacted by subjective elements such as perceptual data collected using the Panorama Social-Emotional Learning Survey, suggesting quantitative methodologies benefit from subjective processes (Shotte, 2016). Credible researchers critique methods and conclusions for bias (Creswell & Creswell, 2018). Objective researchers report all findings thoroughly and accurately, including findings contrary to expected results (Creswell & Creswell, 2018). All data in the study were reported accurately in narrative and table formats. Objectivity includes the use of unbiased language appropriate to the audience (Creswell & Creswell, 2018). The language used was unbiased toward persons of racial identity groups.

Ethical Procedures

United States Department of Health and Human Services (2018b) policy regulates research involving human participants. The “Protection of Human Research Subjects” regulation (45 C.F.R. § 46) exempts research activities in which human participants are involved in educational testing, in which researchers protect the identities of participants, and which do not place participants at risk of harm. The design of the study complied with the requirements of the exemption.

Ethical research design should benefit participants and be sensitive to the needs of minority populations and vulnerable populations, such as children (Creswell & Creswell, 2018). The study benefits participants by informing efforts to close the discipline gap for children of color and increasing the cultural responsiveness of educators. The two main ethical issues in educational research are informed consent and involvement of children in research (Abed, 2015). The use of anonymized archival data eliminated the need for informed consent and demonstrated

sensitivity to the vulnerability of minors while giving voice to all participants through the use of self-report data.

During data analysis, ethical researchers protect the identities of participants (Creswell & Creswell, 2018). Names of participants were replaced with numerical identifiers by district personnel prior to the release of the data for research analysis. Data were accessible to non-project members, and data were reported in groups of sufficient size to protect participants' identities (Fowler, 2014). United States Department of Health and Human Services (2018a) policy "Retention and Access Requirements for Records" (45 C.F.R. § 74.53) requires the retention of clinical research records for a period of three years. Data collection and preparation occurred electronically. District personnel shared the data files through a district password-protected online cloud account or district password-protected email. Cloud sharing minimizes the risk of losing a file associated with the in-person transfer of data or failure to completely delete all versions of a file associated with sharing through email. All electronic data were retained on the researcher's personal password-protected computer, and back-up files were stored in a personal password-protected cloud-storage account for three years.

Objective researchers report all findings thoroughly and accurately, including findings that are contrary to expected results (Creswell & Creswell, 2018). All data in the study were reported accurately in narrative and table formats and were verified by a statistical expert. In the reporting, sharing, and storing of data, proof of compliance with ethical issues is provided, including any disclosure of conflict of interest, and copies of the research are provided to stakeholders and fellow researchers (Creswell & Creswell, 2018). While the researcher works for the school district in the study and was previously employed in one of the schools in the study,

present employment is not in one of the schools included in the study. Results were reported to district leadership for the benefit of the district, which is a requirement of performing research in the urban school district in Colorado from which the population and sample originated.

A verbal request was made to the Executive Director of Education, Data, and Support Services to conduct research in the district. Appendix C is the letter in response to the verbal request granting permission to conduct research. Upon Institutional Review Board approval, a formal, written request was submitted to the district via application to an urban school district in Colorado for access to anonymized archival data for normal educational practice, which does not require informed consent. The application (Colorado Springs School District 11, January 25, 2020) consisted of a Request to Conduct Research Coversheet (see Appendix D), the Research Request Application Checklist (see Appendix E), and the D11 Sponsor Statement of Support (see Appendix F). The district approved the application in eight days in writing (see Appendix G).

Chapter Summary

The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado. Surveys are particularly beneficial for collecting valid and reliable data about personal perceptions from a large sample (Fowler, 2014). The frequency of school discipline was measured as incidents of ISS, OSS, and expulsion. social-emotional learning was measured using the Panorama Social-Emotional Learning Survey mean scale scores in nine areas: compassion, emotion regulation, engagement, grit, learning

strategies, self-efficacy, self-management, sense of belonging, and social awareness.

Quantitative designs examine relationships between and among variables to answer hypotheses (Creswell & Creswell, 2018). Differences in discipline and social-emotional learning were identified with comparative testing, and relationships between discipline and social-emotional learning were measured with relational testing. Validity, reliability, and ethical considerations are discussed. The methodology chapter outlines the research questions, hypotheses, methods, design, and procedures for a contribution to the literature by studying student discipline and social-emotional learning by racial identity.

A well-written chapter on research findings and data analysis resulting from the implementation of the research methodology presents the evidence clearly and allows for an easy understanding of both data and resulting conclusions (James & Slater, 2014). The following chapter describes the quantitative data collection, analysis, results, and the impact of reliability and validity on the research findings. Tables and figures offer additional options for understanding the data.

Chapter 4: Research Findings and Data Analysis Results

Inequity in academic and behavioral outcomes for students of color have included less academic success, stricter school consequences, higher dropout rates, and disproportionate involvement in the criminal justice system compared to White students (McCarter, 2017; Redfield & Nance, 2016). The school-to-prison pipeline has grown since the early 2000s because of changes in school discipline policy (McCarter, 2017). Prior to the school-to-prison pipeline concept, education systems were viewed as a protective factor for children, rather than a risk factor (McCarter, 2017).

The problem has been standardized social-emotional learning universal screeners have not provided educators with sufficient information to implement interventions to close the discipline gap for Black and Hispanic students in the United States (Brown et al., 2018). The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado.

The quantitative research questions explored the relationships among variables to focus on the purpose of the study and answer the research questions (Creswell & Creswell, 2018). Five research questions explored the relationships among race, school discipline, and SEL. To achieve the purpose of the study, the research questions were as follows:

Research Question One: What were the statistically significant differences, if any, in the frequency of in-school suspension, out-of-school suspension, and expulsion for

Black, Hispanic, and White students in an urban school district in Colorado?

Research Question Two: What were the statistically significant differences, if any, in social-emotional learning universal screener scores for Black, Hispanic, and White students in an urban school district in Colorado?

Research Question Three: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for Black students in an urban school district in Colorado?

Research Question Four: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for Hispanic students in an urban school district in Colorado?

Research Question Five: What were the statistically significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for White students in an urban school district in Colorado?

Hypotheses predict an expected relationship between variables. Quantitative hypotheses estimate population values based on collected outcomes (Creswell & Creswell, 2018). The following hypotheses predicted outcomes related to the research questions:

H1₀: No statistically significant difference existed in the frequency of in-school suspension, out-of-school suspension, and expulsion among Black, Hispanic, and White students.

H1_a: The frequency of in-school suspension, out-of-school suspension, and expulsion among the three groups was not equal.

H2₀: No statistically significant difference existed in students' social-emotional learning

- universal screener scores among Black, Hispanic, and White students.
- H2_a: The social-emotional learning scores among the three groups were not equal.
- H3₀: No statistically significant relationships existed between social-emotional learning universal screener scores and the frequency of school discipline for Black students.
- H3_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for Black students.
- H4₀: No statistically significant relationships existed between social-emotional learning universal screener scores and the frequency of school discipline for Hispanic students.
- H4_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for Hispanic students.
- H5₀: No statistically significant relationships existed between social-emotional learning universal screener scores and the frequency of school discipline for White students.
- H5_a: At least one statistically significant relationship existed between social-emotional learning universal screener scores and the frequency of school discipline for White students.

The results are a guide through data analysis with the use of tables and figures to encourage understanding of the data. Research findings and results of data analysis are reported with neutrality. Meeting the standard for neutrality requires clear delineation of majority findings, minority findings, and outlier data (James & Slater, 2014). Data collection procedures,

validity and reliability in the collection, and comparative and relational analysis of the data by racial identity are specified in the results.

Data Collection

Some methods of data collection are more appropriate for certain types of data. Demographic data can be collected through public or private records, as can reports of acts or behaviors such as incidents of student discipline. Opinion and attitude data can be collected through surveys (Spickard, 2017).

Written permission to conduct the study was granted by the school district on February 21, 2020. Requests for data were made verbally to the data owners on February 24, 2020. Data were collected for students who attended the six elementary schools included in the study for the entire 2017-2018 school year and who took the Panorama Social-Emotional Learning Survey in the fall of 2018. School discipline and racial identity data were collected for 899 second-grade through fourth-grade students for the 2017-2018 school year. Panorama Social-Emotional Learning Survey data were collected for 877 third-grade through fifth-grade students who took the Panorama Social-Emotional Learning Survey in the respective schools in the fall of 2018.

Population and Sample Selection

The original research plan called for all data collection from a sole source in the school district's Education Data and Support Services department, who would anonymize and merge the data into a single Excel file. In a deviation from the originally proposed data collection plan, racial identity and discipline report data were collected and anonymized with a numerical identifier in an Excel spreadsheet from the Q database by the Director for Student Support and Engagement and uploaded into a password-protected cloud drive on February 26, 2020.

Panorama Social-Emotional Learning Survey data were collected and anonymized with a common numerical identifier in an Excel spreadsheet by the Executive Director of Student Success and Wellness via password-protected district email from a Panorama data analyst, and the report was uploaded into password-protected cloud storage on March 5, 2020. Following receipt from the data owners, the two spreadsheets were merged into a master Excel spreadsheet using the common numerical identifier on March 7, 2020. Students who identified as a race other than Black, Hispanic, or White were excluded from the population, for a total of $N = 626$ stratified by racial identity into three groups of 70 Black students, 262 Hispanic students, and 287 White students.

In another deviation from the original plan, expulsion data were not included in the data set, as only two students had been expelled in the 2017-2018 school year, and neither student who had been expelled met the inclusion criteria. The original plan assumed Panorama would report data categorically as “Favorable” or “Unfavorable,” which was then to be converted into interval level percent data. Panorama reported each score as the mean for each social-emotional learning scale with a range of 1-5, rather than as a categorical score as had been anticipated in the methodology. Mean scale scores are a higher level of data, preferable to the anticipated categorical data because of increased precision. Data in the master spreadsheet included numerical identifiers, race codes, gender, grade level, the frequency of ISS, the frequency of OSS, and the scale scores for each of nine social-emotional learning competencies for each of 626 Black, Hispanic, and White participants.

The original sample selection plan called for stratified random sampling followed by calculating sample size by estimating the minimally adequate sample size for the smallest group,

then calculating the size of subsequent groups corresponding to the groups' proportion in the population (Fowler, 2014). Due to the low frequency of discipline incidents for all groups and a requirement of the Kruskal-Wallis *H*-test to have roughly equal group sizes (Salkind, 2007), the sampling method was adjusted to combine a mixture of nonprobability sample designs and probability sample designs according to the nature of the sampled unit (Daniel, 2012).

Random sampling of the Hispanic and White groups would have resulted in underrepresentation of discipline for the groups. All student records with discipline incidents greater than zero were included in the sample groups to preserve the proportion of discipline among the three groups. Three equal-sized groups were selected by including the entire smallest group of Black students with $n = 70$. Hispanic and White groups included all students with discipline frequency data greater than zero, then additional sample participants were selected randomly using the random integer function in SPSS, resulting in three equal groups of 70 students, for a total of 210 sample participants which were representative of the population by discipline, grade, and gender.

Data Cleaning

Data cleaning criteria for excluding extreme values and identifying measurement or data-entry errors are not standardized (Crowe et al., 2014). Data cleaning includes checking files for accuracy and completeness (Fowler, 2014). Well-designed surveys tend to have low item non-response rates, which minimizes the effect of item non-response (Fowler, 2014). Analytic software often substitutes the average answer for the whole sample for missing answers (Fowler, 2014).

Seven missing social-emotional learning data points were replaced with the average scale

score for the respective social-emotional learning competency. Of the 5,634 Panorama Social-Emotional Learning Survey scale scores possible as calculated by 626 students, each with nine social-emotional learning scores, seven scores were missing. No scores were missing for the Black group, five scores were missing for the Hispanic group, and two scores were missing for the White group. While extreme values were included in the discipline data, no extreme values were removed, as removing extreme values would have created a new set of extreme values. Additional data cleaning involved replacing two commas with decimals and removing extra blank spaces within numerical cells.

Demographic Data

Demographic data describe the collective characteristics of a population, including but not limited to race, gender, age, education level, and income and the extent to which the sample is representative of the population (Spickard, 2017). Data were stratified by racial identity into groups of 70 Black students, 269 Hispanic students, and 287 White students, while the sample contained three equal groups of 70 students. The total population consisted of 282 females and 344 males. The total sample consisted of 92 females and 118 males.

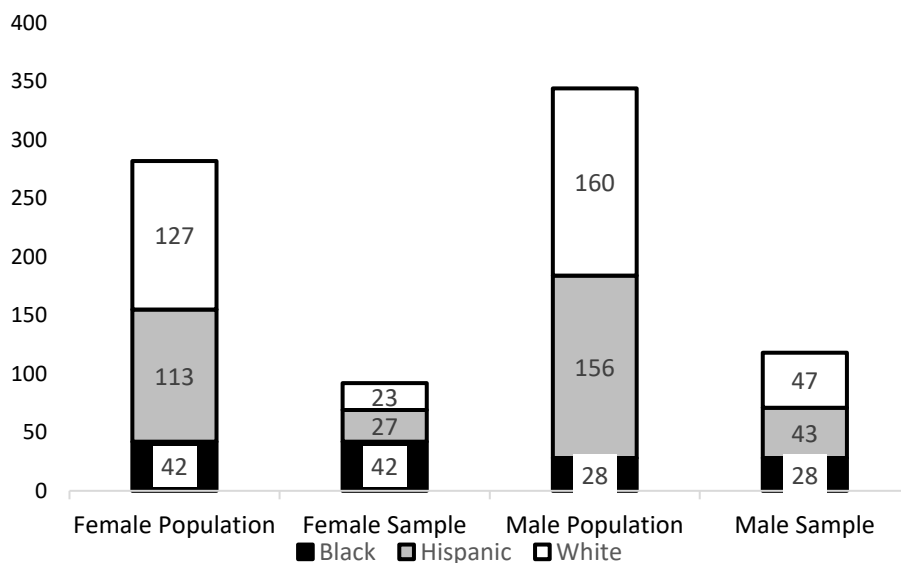


Figure 3. Population and sample size by gender and racial identity, demonstrating similar proportions by gender.

Figure 3 is a graph of the population and sample by gender and racial identity. The population consisted of 196 students who were third-graders, 198 students who were fourth-graders, and 232 students who were fifth-graders in the fall of 2018. Figure 4 is a graphic representation of the number of students in the population and sample by grade level in the fall of 2018.

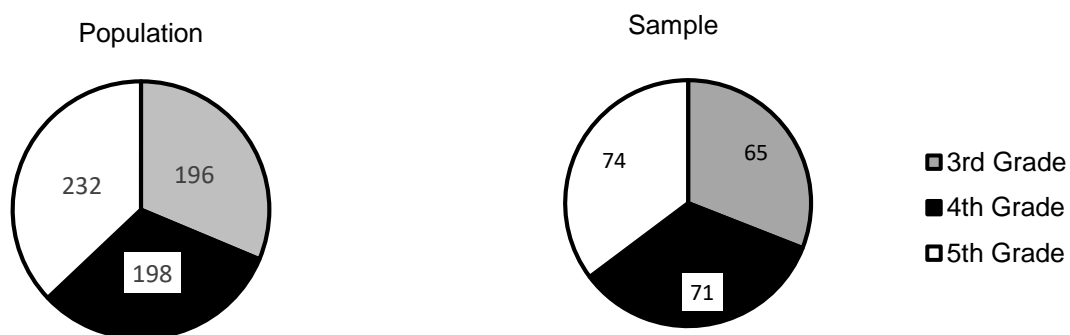


Figure 4. Population and sample sizes by grades in the fall of 2018.

Results

Descriptive and non-parametric, inferential statistics were used to answer the research questions and hypotheses. The population included 37 incidents of ISS and 61 incidents of OSS for a total of 97 discipline incidents for the 2017-2018 school year. Black students, who represented 11.18% of the population, accounted for 22.68% of total discipline incidents. Hispanic students, who were 42.97% of the population, represented 16.49% of incidents, and White students were 45.85% of the population and accounted for 60.82% of discipline incidents. Figure 5 shows the group representation within the population and group representation for school discipline incidents for each racial identity group. All records with more than zero incidents of school discipline were included in the sample to preserve the proportion of total discipline among groups.

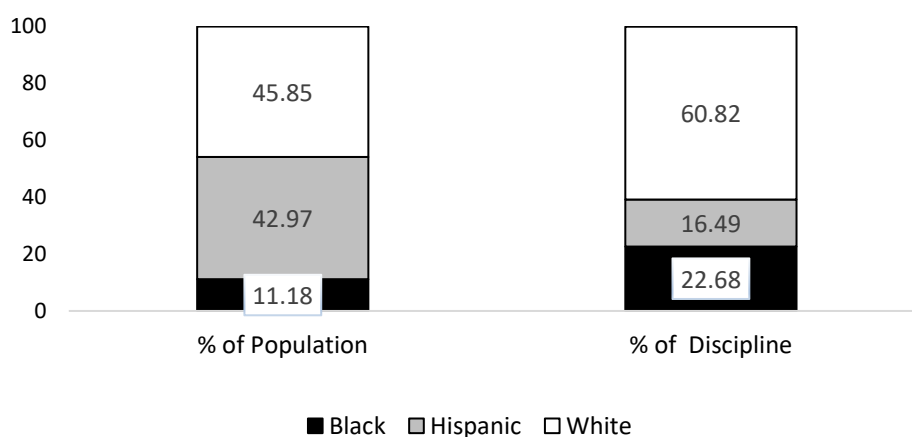


Figure 5. Percent of population and discipline representation by racial identity.

Student discipline was categorized by ISS and OSS. Social-emotional learning was categorized as compassion, emotion regulation, engagement, grit, learning strategies, self-efficacy, self-management, sense of belonging, and social awareness. Descriptive statistics for

the mean and standard deviation of each dependent variable for each group are listed in Table 1.

Table 1

Means and Standard Deviations of Sample Discipline and Social-Emotional Learning by Racial Identity

Variable	Black <i>n</i> = 70		Hispanic <i>n</i> = 70		White <i>n</i> = 70	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
ISS	0.14	0.55	0.07	0.31	0.30	0.80
OSS	0.17	0.82	0.16	0.63	0.54	0.94
Compassion	3.67	0.77	3.72	0.82	3.63	0.94
Emotion Regulation	3.43	0.86	3.50	0.91	3.14	0.93
Engagement	4.07	0.83	3.96	0.79	3.59	0.93
Grit	3.57	0.83	3.54	0.81	3.35	0.82
Learning Strategies	3.83	0.76	3.76	0.79	3.59	0.84
Self-Efficacy	3.46	0.74	3.48	0.83	3.28	0.86
Self-Management	3.75	0.63	3.86	0.65	3.69	0.68
Sense of Belonging	3.86	0.78	3.80	0.84	3.45	0.98
Social Awareness	3.81	0.64	3.78	0.74	3.65	0.72

Note: *n* = number of group cases; *M* = mean; *SD* = standard deviation; ISS = in-school suspension; OSS = out-of-school suspension. The chart lists the means and standard deviations of each category of the dependent variable for each racial identity group as calculated using the average and sample standard deviation formulas in Microsoft Excel rounded to two decimal places.

Assumptions

The assumptions made in the study were appropriate for the methodology. The collection and analysis of historic social-emotional learning universal screener data, school discipline data,

and racial identity data required the assumption of honest and accurate data entry. Cultural neutrality of the social-emotional learning universal screener instrument was presumed, and survey administration was assumed to have been under proper testing conditions as defined by the test publisher. The assumptions were necessary, as the research design included archival data for which data entry controls could not be implemented because data entry occurred in the past. No assumption was made regarding a causal relationship among variables of school discipline, social-emotional learning universal screener data, and racial identity.

Comparative, parametric tests, such as ANOVAs, assume a normal distribution, homogeneity of variance, truth of the null hypothesis, and random distribution (Belhekar, 2016a). Discipline data did not meet the criteria of a normal distribution, as illustrated in Figure 6. The frequency of total school discipline, calculated as the sum of incidents of ISS and OSS for each student record, was heavily skewed to the right. For these reasons, the original plan to use the parametric one-way ANOVAs with post hoc *t*-tests was modified in favor of the non-parametric equivalents to include the Kruskal-Wallis *H*-test with post hoc Mann-Whitney *U*-test to answer research questions one and two. The non-parametric Pearson Chi Square test was used to answer research questions three, four, and five.

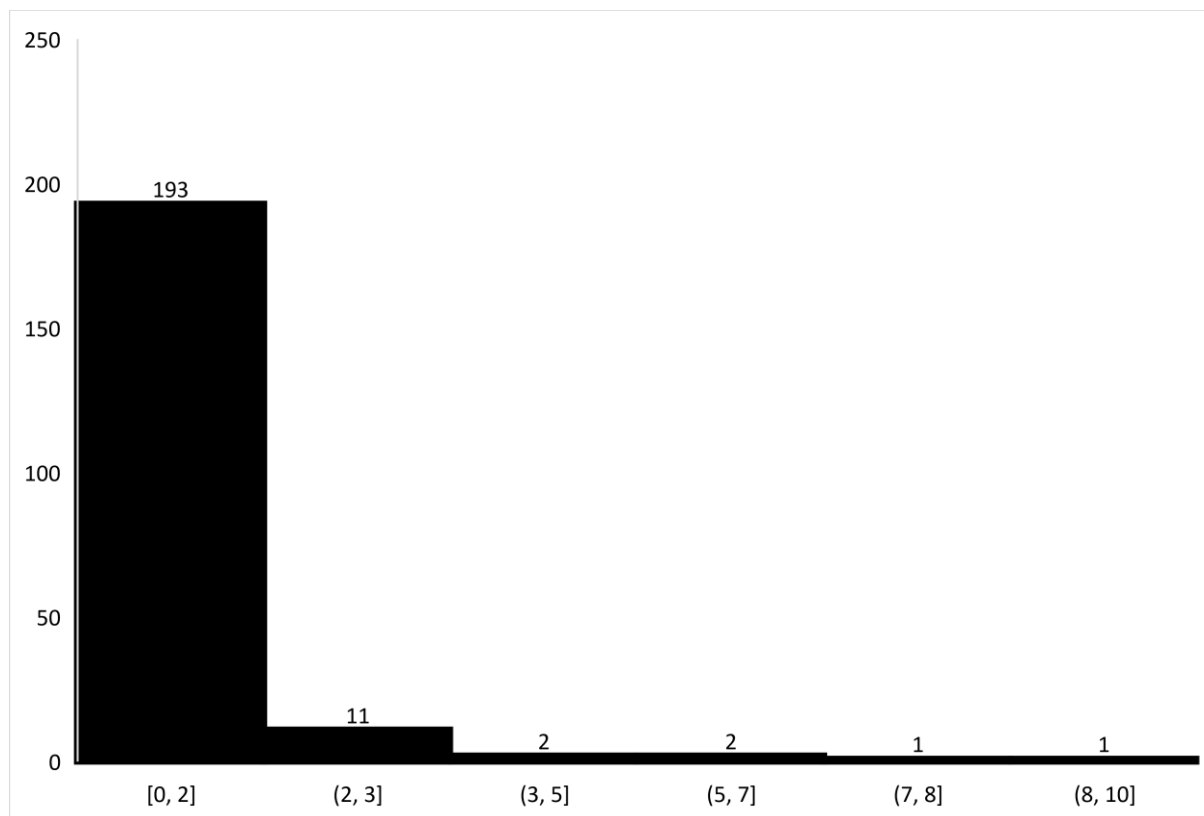


Figure 6. Distribution of total incidents of school discipline.

Research Questions and Hypotheses

The quantitative research questions explored the relationships among variables in alignment with the purpose of the study. The relationships among the variables answered the research questions, and the hypotheses predicted an expected relationship between variables (Creswell & Creswell, 2018). The Kruskal-Wallis H -test and post hoc Mann-Whitney U -tests identified differences between the dependent variables of frequency of school discipline and social-emotional learning screener scores and the independent variable of racial identity to answer the first two research questions. The Pearson Chi Square test was employed to identify relationships between Panorama Social-Emotional Learning Survey scale scores and school discipline for Black, Hispanic, and White students to address research questions three, four, and five. The following research questions were addressed, and the corresponding hypotheses were

tested to achieve the purpose of the comparative, relational study.

Research Question One: What were the significant differences, if any, in the frequency of in-school suspension, out-of-school suspension, and expulsion for Black, Hispanic, and White students in an urban school district in Colorado?

The frequency of expulsion was not tested, as no incidents of expulsion were included in the data set. Kruskal-Wallis H -tests were conducted to test for differences in means for ISS and OSS among Black, Hispanic, and White students at the $\alpha = .05$ level. The Kruskal-Wallis H -test identified a statistical difference for OSS ($X^2(3) = 22.80, 2, p < .001$) but not for ISS ($X^2(3) = 4.04, 2, p = .13$). Because the results for OSS were significant, post hoc Mann-Whitney U -tests were conducted, which identified a difference in OSS between Hispanic and White students and between Black and White students. The results are detailed in Table 2.

Table 2

Post Hoc Mann-Whitney U-Test for Differences among Pairs of Racial Identity Groups for OSS

Groups	Z	p	r^2
Black and Hispanic	-0.30	.77	<.001
Hispanic and White ^a	-3.65	<.001***	.10
Black and White ^b	-3.87	<.001***	.11

Note. $n = 210$. Z = a standardized observed value; p = probability of a true null hypothesis; r^2 = percent of the variance of the dependent variable attributable to the independent variable. Mann-Whitney U -Tests results of significance indicate differences between Hispanic and White^a students and between Black and White^b students in OSS using the Bonferroni correction. *** $p < .001$.

The two-tailed Mann-Whitney U -test was conducted post hoc to identify differences in the mean frequency of OSS between racial identity groups. The Mann-Whitney U -test indicated

the mean for OSS was greater for White ($M = 0.54$, $SD = 0.94$) students than for Hispanic ($M = 0.16$, $SD = 0.63$) students ($Z = -3.65$, $p < .001$). The mean for OSS was greater for White ($M = 0.54$, $SD = 0.94$) students than for Black ($M = 0.17$, $SD = 0.82$) students ($Z = -3.87$, $p < .001$). In each case of significance, the mean frequency of school discipline was greater for White students than for Black and Hispanic students. The null hypothesis was rejected in favor of the alternative hypothesis, which stated the frequency of discipline among the three groups was not equal.

Figure 7 displays the differences in means for OSS among the three groups.

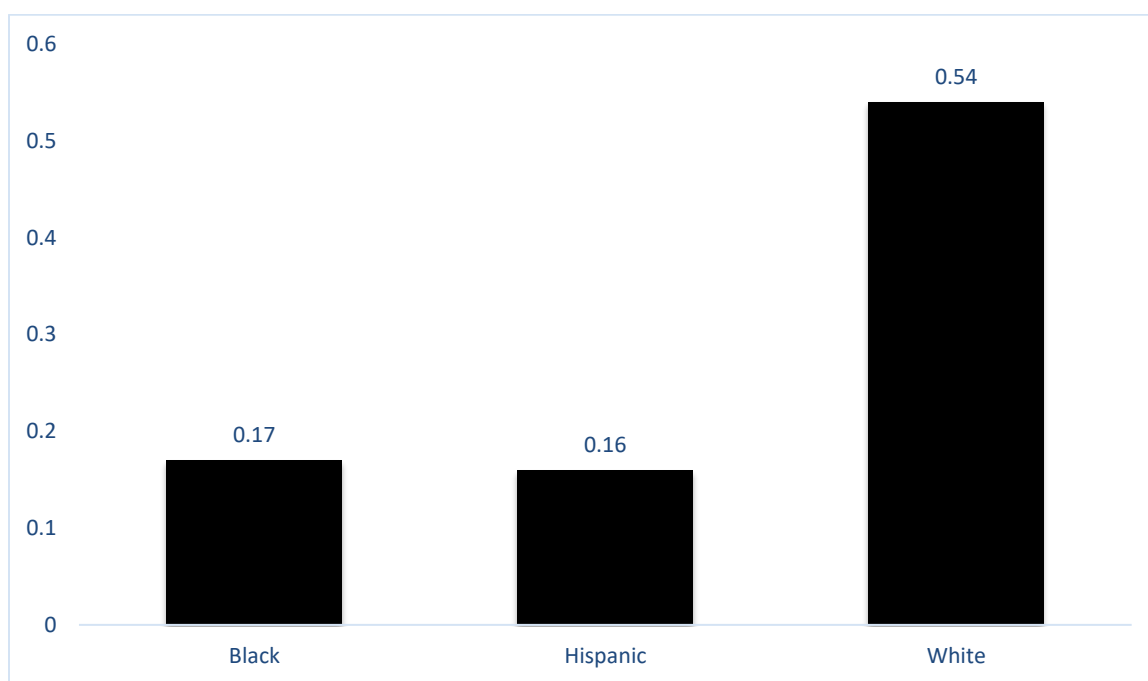


Figure 7. Mean frequency of OSS for Black, Hispanic, and White students.

Research Question Two: What were the significant differences, if any, in social-emotional learning universal screener scores for Black, Hispanic, and White students in an urban school district in Colorado?

Kruskal-Wallis H -tests were conducted to test for differences in means for nine scales of social-emotional learning among Black, Hispanic, and White students at the $\alpha = .05$ level. The

Kruskal-Wallis H -test identified a statistical difference for engagement ($X^2(3) = 13.69, 2, p = .001$) and sense of belonging ($X^2(3) = 7.77, 2, p = .02$). The Kruskal-Wallis test did not identify a statistical difference for compassion ($X^2(3) = .21, 2, p = .90$), emotion regulation ($X^2(3) = 6.60, 2, p = .037$), grit ($X^2(3) = 2.96, 2, p = .23$), learning strategies ($X^2(3) = 2.89, 2, p = .24$), self-efficacy ($X^2(3) = 1.49, 2, p = .48$), self-management ($X^2(3) = 2.42, 2, p = .30$), or social awareness ($X^2(3) = 2.54, 2, p = .28$).

Two-tailed Mann-Whitney U -tests were conducted post hoc which quantified differences between racial identity groups in mean scale scores for engagement and sense of belonging. The results are detailed in Table 3. The Mann-Whitney test indicated the mean score for engagement was higher for Black ($M = 4.07, SD = 0.83, Z = -3.47, p < .001$) and Hispanic ($M = 3.96, SD = 0.79, Z = -2.62, p = .009$) students than for White ($M = 3.59, SD = 0.93$) students. The mean scale score for sense of belonging was higher for Black ($M = 3.86, SD = 0.78$) students than for White ($M = 3.45, SD = 0.98$) students ($Z = -2.55, p = .011$).

Table 3

Mann-Whitney U-Test for Differences among Pairs of Racial Identity Groups for Social-Emotional Learning

SEL Scale	Groups	Z	p	r ²
Engagement	Black and Hispanic	-1.30	.196	.01
	Hispanic and White ^a	-2.62	.009*	.05
	Black and White ^b	-3.47	p<.001***	.09
Sense of Belonging	Black and Hispanic	-0.35	.726	<.001
	Hispanic and White	-2.23	.026	.04
	Black and White ^c	-2.55	.011*	.05

Note. n = 210. SEL = social-emotional learning; Z = a standardized observed value; p = the probability of a true null hypothesis; r² = percent of the variance of the dependent variable attributable to the independent variable.

Mann-Whitney U-Tests results indicate a differences between Hispanic and White^a and between Black and White^b students in engagement and a difference between Black and White^c students in sense of belonging using the Bonferroni correction.

*p < .0167. ***p < .001.

In each case of significance, the mean social-emotional learning scale score was greater for students of color than for White students. Black and Hispanic students had a common result of greater scores for engagement than White students. The null hypothesis was rejected in favor of the alternative hypothesis, which stated social-emotional learning scores among the three groups were not equal. Figure 8 illustrates the relevant mean scores for engagement and sense of belonging for each group.

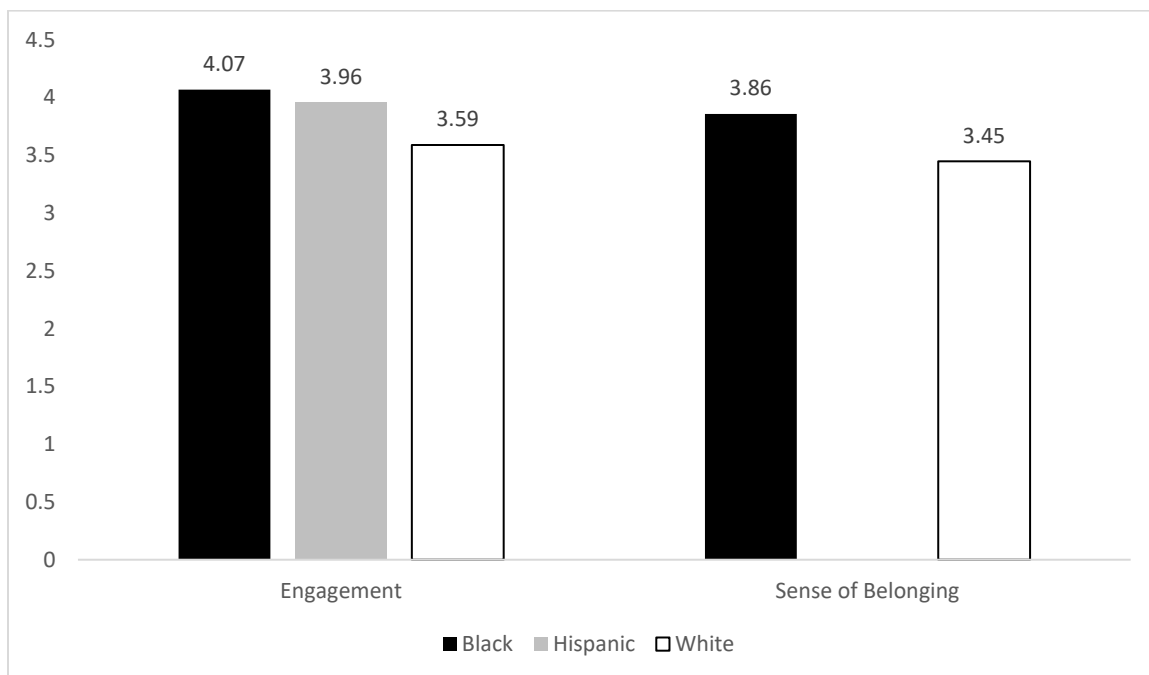


Figure 8. Mean social-emotional learning scores by race.

Research Question Three: What were the significant relationships, if any, between social-emotional learning universal screener scores and the frequency of school discipline for Black students in an urban school district in Colorado?

Two-tailed Pearson Chi Square tests were conducted at a significance level of $\alpha = .05$ to test the hypothesis for the third research question. School discipline was categorized as the frequency of ISS and OSS. Social-emotional learning was categorized as the frequency of favorable and unfavorable answers on the survey. Phi coefficients for the relationships between social-emotional learning and ISS and between social-emotional learning and OSS fell within the moderate to high strength ranges ($\phi = .44 - .93$). No relationships between social-emotional learning and the frequency of school discipline were determined to be significant. Table 4 displays the results of the Pearson Chi Square tests for association between social-emotional learning and school discipline for Black students. Due to the identification of no significant

relationship between scores on nine scales of social-emotional learning and the frequency of school discipline for Black students, the decision was to fail to reject the null hypothesis.

Table 4

Pearson Chi Square Relationships for Social-Emotional Learning and School Discipline for Black Students

SEL Scale	ISS				OSS			
	X^2	df	Φ	p	X^2	df	Φ	p
Compassion	13.60	24	.44	.96	14.41	36	.45	>.99
Emotion Regulation	25.42	38	.60	.94	32.01	57	.68	>.99
Engagement	24.79	30	.60	.74	43.32	45	.79	.54
Grit	19.32	26	.53	.82	28.45	39	.64	.89
Learning Strategies	21.04	26	.59	.74	19.14	39	.52	>.99
Self-Efficacy	21.40	34	.55	.95	42.13	51	.78	.81
Self-Management	60.15	46	.93	.08	60.31	69	.93	.76
Sense of Belonging	27.51	30	.63	.60	49.84	45	.84	.29
Social Awareness	30.49	38	.67	.80	28.45	39	.64	.89

Note. $n = 70$. ISS = in-school suspension; OSS = out-of-school suspension; SEL = social-emotional learning; X^2 = Chi Square coefficient; df = degrees of freedom; Φ = phi coefficient; p = probability the null hypothesis is true. No relationships between social-emotional learning and school discipline for Black students were significant.

Research Question Four: What were the significant relationships, if any, between

social-emotional learning universal screener scales and the type of school discipline

for Hispanic students in an urban school district in Colorado?

Two-tailed Pearson Chi Square tests were conducted at a significance level of $\alpha = .05$ to test the hypothesis for the fourth research question. School discipline was categorized as the

frequency of ISS and OSS. Social-emotional learning was categorized as the frequency of favorable and unfavorable answers on the survey. Phi coefficients for the relationships between social-emotional learning and ISS and social-emotional learning and OSS fell within the moderate to high strength ranges ($\phi = .66 - 1.47$). The relationship between ISS and compassion [$X^2(26, n = 70) = 42.27, p < .05$], engagement [$X^2(38, n = 70) = 86.33, p < .001$], learning strategies [$X^2(30, n = 70) = 81.92, p < .001$], sense of belonging [$X^2(42, n = 70) = 61.25, p < .05$], and social awareness [$X^2(48, n = 70) = 107.48, p < .001$] were significant. The relationship of OSS to engagement [$X^2(57, n = 70) = 151.74, p < .001$], learning strategies [$X^2(45, n = 70) = 90.26, p < .001$], self-management [$X^2(66, n = 70) = 108.31, p < .001$], and social awareness [$X^2(72, n = 70) = 119.91, p < .001$] were significant. Table 5 displays the results of the Person Chi Square tests for relationships between social-emotional learning and school discipline for Hispanic students.

The Pearson Chi Square tests identified multiple significant relationships between social-emotional learning and school discipline for Hispanic students. The relationships between engagement, learning strategies, social awareness and school discipline were significant for both ISS and OSS for Hispanic students. The null hypothesis was rejected in favor of the alternative hypothesis due to the identification of multiple significant relationships between social-emotional learning scales and ISS and OSS for Hispanic students.

Table 5

Pearson Chi Square Relationships for Social-Emotional Learning and School Discipline for Hispanic Students

SEL Scale	ISS				OSS			
	X^2	df	Φ	p	X^2	df	Φ	p
Compassion	2.27	26	.78	.02*	52.48	39	.87	.07
Emotion Regulation	50.64	38	.85	.08	76.75	57	1.05	.04
Engagement ^a	86.33	38	1.11	$p < .001^{***}$	151.74	57	1.47	$p < .001^{***}$
Grit	32.66	26	.68	.17	54.40	39	.88	.05
Learning Strategies ^b	81.92	30	1.08	$p < .001^{***}$	90.26	45	1.14	$p < .001^{***}$
Self-Efficacy	30.08	36	.66	.75	44.43	54	.80	.82
Self-Management	40.48	44	.76	.62	108.37	66	1.24	$p < .001^{***}$
Sense of Belonging	64.62	28	.96	$p < .001^{***}$	61.25	42	.94	.03
Social Awareness ^c	107.48	48	1.24	$p < .001^{***}$	119.91	72	1.31	$p < .001^{***}$

Note. $n = 70$. Findings of significance consistent with White group in boldface. ISS = in-school suspension; OSS = out-of-school suspension; SEL = social-emotional learning; X^2 = Chi Square coefficient; df = degrees of freedom; Φ = phi coefficient; p = probability the null hypothesis is true. The relationships of ISS to compassion, engagement, learning strategies, sense of belonging, and social awareness were significant. The relationships of OSS to engagement, learning strategies, self-management, and social awareness were significant. Findings were significant for both ISS and OSS on the social-emotional learning scales of engagement^a, learning strategies^b, and social awareness^c.

* $p < .05$. *** $p < .001$.

Research Question Five: What were the significant relationships, if any, between social-emotional learning universal screener and the frequency of school discipline for White students in an urban school district in Colorado?

Two-tailed Chi Square tests were conducted at a significance level of $\alpha = .05$ to test the hypothesis for the fifth research question. School discipline was categorized as the frequency of

ISS and OSS. Social-emotional learning was categorized as the frequency of favorable and unfavorable answers on the survey. Phi coefficients for the relationships between social-emotional learning and ISS and social-emotional learning and OSS fell within the moderate to high strength ranges ($\phi = .66, 1.47$). The relationship between ISS and engagement [$X^2(72, n = 70) = 105.57, p < .0$] was significant. The relationships of OSS to compassion [$X^2(56, n = 70) = 86.36, p < .01$] and engagement [$X^2(72, n = 70) = 137.69, p < .001$] were significant.

Engagement was significantly related to both ISS and OSS for White students, as was the case for Hispanic students. Table 6 displays the results of the Pearson Chi Square tests for the relationships between social-emotional learning and school discipline for White students. The null hypothesis was rejected in favor of the alternative hypothesis due to the identification of multiple significant relationships between social-emotional learning scale scores and school discipline for White students.

Table 6

Pearson Chi Square Relationships for Social-Emotional Learning and School Discipline for White Students

SEL Scale	ISS				OSS			
	X^2	df	Φ	p	X^2	df	Φ	p
Compassion ^b	52.38	56	.87	.61	86.36	56	1.11	$p = .006^{**}$
Emotion Regulation	72.03	72	1.01	.48	65.67	72	.97	.69
Engagement ^a	105.57	72	1.23	.006^{**}	137.69	72	1.40	$p < .001^{***}$
Grit	39.93	48	.76	.79	48.37	48	.83	.46
Learning Strategies	71.38	60	1.01	.15	78.03	60	1.06	.06
Self-Efficacy	77.62	80	1.05	.56	106.43	80	1.23	.03
Self-Management	107.90	92	1.24	.12	102.02	92	1.21	.22
Sense of Belonging	77.76	60	1.05	.06	63.16	60	.96	.37
Social Awareness	80.80	92	1.07	.79	97.18	92	1.18	.33

Note. $n = 70$. Findings of significance consistent with Hispanic group in boldface. ISS = in-school suspension; OSS = out-of-school suspension; SEL = social-emotional learning; X^2 = Chi Square coefficient; df = degrees of freedom; Φ = phi coefficient; p = probability the null hypothesis is true. The relationship between ISS and engagement^a was significant. The relationships between OSS and engagement^a and compassion^b were significant. Findings were significant for the relationship between both ISS and OSS and the social-emotional learning scale of engagement^a.

****** $p < .01$. ******* $p < .001$.

Reliability and Validity

Threats to internal validity can result when participants in the sample possess qualities that create a predisposition to certain outcomes (Creswell & Creswell, 2018). The threat to internal validity was controlled by analyzing sample data, which was representative of the population by grade level and gender and which equally represented students by racial identity. The use of archival data potentially posed a threat to internal validity because the circumstances

of data collection were not controllable, requiring the assumptions of honest and accurate data collection with reasonable survey conditions. The social-emotional learning universal screener was a computer-based survey, which controlled for social desirability bias by applying equally to all participants. The computer-based instrument increased reliability, as computer-based procedures have been found to elicit more truthful responses than paper surveys (Gnambs & Kaspar, 2015). Control for threats from omitted variables in using archival survey involved administering the survey as intended by the publisher.

Threats to external validity can result in incorrect inferences about the population from the sample outcomes (Creswell & Creswell, 2018), which was controlled by having a large sample size in proportion to the population and by including all student records in the sample preserved the rate of school discipline across groups as shown in Figures 1 and 2 (see Chapter 2 for detailed information). The sample was representative of the population by grade and gender, as indicated in Figure 3 and Figure 4 (see Chapter 4, Demographic Data section for detailed information). Due to the restrictive nature of inclusion criteria for the population under study, results cannot be generalized beyond the study's population.

Credibility is the extent to which a research study is believable and appropriate. Credibility should be considered along with additional criteria of trustworthiness, such as objectivity and reliability (Mills, Durepos, & Wiebe, 2010). The Panorama Social-Emotional Learning Survey is a reliable, standardized instrument with a Cronbach alpha value of .78 (Panorama Education, 2016b). Objectivity was maintained through anonymization of data, accurate and complete analysis and reporting of data, the use of unbiased language. Selection of the appropriate analyses and the accuracy of the computations were paramount to the credibility

of the study (Drew, Hardman, & Hosp, 2008). Because of the importance of accuracy in reporting of data analysis, an unbiased statistical expert verified the results.

Chapter Summary

The results were detailed by specifying data collection procedures, including variations in procedures from the original methodology plan. Data analysis and results were reported for five research questions and the aligned hypotheses. The first two research questions examined potential differences in school discipline and social-emotional learning by racial identity. The mean for OSS was greater for White students than for Black or Hispanic students. The mean scale score for Engagement was higher for Hispanic students than for White students. The mean scale score for Engagement and Sense of Belonging was higher for Black students than for White students. Black and Hispanic students shared the result of a higher scale score for Engagement as compared to White students.

Research questions three, four, and five examined the relationships between school discipline and social-emotional learning by racial identity. No significant relationships were found between social-emotional learning and school discipline for Black students. Multiple significant relationships between social-emotional learning scores and the frequency of school discipline for Hispanic and White students were identified. Hispanic and White students shared the common result of significant relationships between Engagement and school discipline in the ISS and OSS categories. The discussion synthesizes the findings, interpretations, and conclusions drawn from the results, along with limitations of the study, recommendations for future research, and implications for leadership.

Chapter 5: Discussion and Conclusions

The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado. The first two hypotheses examined whether significant differences existed in school discipline and social-emotional learning by racial identity. The mean for OSS was greater for White students than for Black or Hispanic students. The mean scale score for engagement was higher for Hispanic students than for White students. The mean scale score for engagement and sense of belonging was higher for Black students than for White students. Sense of belonging was greater for Black students than for White students and associated with discipline for Hispanic students. Black and Hispanic students shared the result of a higher scale score for engagement as compared to White students (see Chapter 4 for detailed information).

Research questions three, four, and five examined the relationships between school discipline and social-emotional learning by racial identity. No significant relationships were identified between social-emotional learning and school discipline for Black students. Multiple significant relationships between social-emotional learning scores and frequency of school discipline for Hispanic and White students were identified. Hispanic and White students shared the result of significant relationships between engagement and school discipline in the ISS and OSS categories. The discussion synthesizes and interprets the results with critical race theory and transformational leadership theory to recommend further research and changes in practice and to

examine the implications for social justice leadership.

Findings, Interpretations, Conclusions

The findings confirm, disconfirm, or extend knowledge by comparing the results to the peer-reviewed literature. Interpreting the data involves showing trends, patterns, and connections in the results. The conclusions include recommendations for future action based on the research.

School Discipline

Counter to the predominant findings in the literature, the results of research question one did not corroborate disproportionate school discipline for students of color as previous studies indicated (e.g., Goplan & Nelson, 2019; United States Department of Education, 2016; United States Department of Education, 2018a). Though significant differences were found in OSS, the frequency of discipline was greater for White students than for Black or Hispanic students. Literature has supported grade level, English speaking status, minority threat hypothesis, and the critical race theory (Bell, 1995) principle of interest convergence as factors with the potential to impact discipline equity in favor of students of color (Burke, 2015; Ousey & Unnever, 2012; Rector-Aranda, 2016; Vincent, Tobin, Hawken, & Frank, 2012). The magnitude of discipline discrepancies for students of color has been found to increase in middle school as compared to elementary school (Vincent et al., 2012), while the suspension rate of elementary-age English learners in Oregon was found to be lower than the suspension rate for English speaking peers (Burke, 2015). The contradictory findings of research question one may be influenced by these factors.

Originally proposed by Blalock (1967), the minority threat hypothesis proposes racial threat is strongest in areas where the powerful class is threatened by minority class growth until

the minority group reaches a numerical presence where suppression is no longer effective (Ousey & Unnever, 2012). Consistent with the minority threat hypothesis, no association has been found between the percentage of Black, Hispanic, and Native American student enrollment and exclusionary responses to school misconduct, but race was associated with reduced access to mild and restorative school discipline (Mitchell, Armstrong, & Armstrong, 2020). As illustrated in Figure 1 (see Chapter 2 for detailed information), students of color comprised a greater proportion of the population than White students. Minority threat hypothesis may contribute to the findings which do not support inequity for students of color in exclusionary discipline in the study population, which is comprised predominantly of students of color.

Interest convergence is a principle of critical race theory (Bell, 1995) in which racial equality is advanced when the interest of racial minority populations converges with the interest of those in power (Capper, 2015; DeMatthews, 2016; Hiraldo, 2019; McCoy & Rodricks, 2015). School reform is a type of interest convergence, as illustrated by the A Nation at Risk report (National Commission on Excellence in Education, 1983). While the report expressed concern for the failure of the education system to meet the needs of underprivileged students, the subsequent emphasis on curricular standardization, competition, high-stakes testing, accountability, school choice, and privatization has created further opportunities to exploit the underrepresented (Rector-Aranda, 2016). Interest convergence in the form of discipline reforms beneficial to White persons in power, such as teachers and school administrators, may have contributed to the results of the first research question, which disconfirm the majority of findings on the racial discipline gap.

Social-Emotional Learning

Social-emotional learning is a process for helping students develop the skills necessary for life effectiveness (CASEL, 2007). Many researchers have found the blending of multi-tiered systems of support and social-emotional learning can support positive outcomes for all students (Adelman & Taylor, 2010; Barnett, 2019; CASEL, 2018; Saeki et al., 2011). Alignment of MTSS and school counseling efforts, such as the use of social-emotional learning universal screener data, presents an opportunity for schools to promote equitable academic and social-emotional learning outcomes for all students by advancing culturally responsive interventions which serve students and families more effectively (Belser et al., 2016; Bohanon et al., 2016; Goodman-Scott et al., 2016; Sink & Ockerman, 2016).

By identifying significantly greater social-emotional learning scores for Black students in engagement and sense of belonging and for Hispanic students in engagement as compared to White students, the findings of the second research question supported researchers' advocacy for the inclusion of social-emotional learning in MTSS. By confirming racial identity as a factor in students' differing social-emotional learning needs and strengths, the results of the second research question provided insight into how educators can use data-driven universal screeners such as the Panorama Social-Emotional Learning Survey to respond to social-emotional learning needs from a culturally responsive perspective (Banks & Obiakor, 2015; Bohanon et al., 2016; Goodman-Scott et al., 2016; Sink & Ockerman, 2016). The findings identified Black and Hispanic students as scoring higher on two scales of social-emotional learning than White students. Consistent with critical race theory, the results from students' self-report challenged the status quo belief by White educators who often view students of color from a deficit perspective

(Simson, 2014). The common result of higher engagement scores for Black and Hispanic students as compared to White students, combined with a lower frequency of OSS for these groups compared to White peers raises the question as to a potential negative relationship between engagement and school discipline. The findings addressed a gap in the literature regarding culturally responsive adaptations to the use of universal screeners by naming self-reported social-emotional learning strengths of students of color using quantitative methods.

The Relationship Between School Discipline and SEL

Research questions three, four, and five inquired into relationships between the frequency of school discipline and social-emotional learning scores by racial identity group. No significant relationships were identified between social-emotional learning scores and frequency of school discipline for Black students (see Chapter 4 for detailed information). The result may be attributable to the relatively small representation in the study by Black males ($n = 28$), who nationally experience the greatest proportion of school discipline of all subgroups (see Chapter 2 for detailed information).

When considering the findings of the first two research questions in which Black students experienced lesser OSS and higher scores in engagement and sense of belonging than White students, the lack of relationship between social-emotional learning and school discipline for Black students raises a question as to the cultural relevance of the instrument. Objections to universal screening have included concerns about data interpretation and false positives, resulting in stigmatization (Owens et al., 2015). Particularly considering the findings of significant relationships for Hispanic and White students in research questions three and four, the finding of no significant relationship between social-emotional learning and school discipline for

Black students warrants further investigation.

The relationships between engagement, learning strategies, and social awareness with ISS and OSS were significant for Hispanic students in answering the fourth research question (see Chapter 4 for detailed information). The findings may suggest a cultural norm or value at play in the district's Hispanic community concerning education. For Hispanic youth, high "familismo" and low "simpatia" are associated with lower anxiety and other mental health symptoms. Familismo is a strong identification and emotional bond with family, while simpatia is harmony-producing behaviors even when remaining agreeable requires personal sacrifice (Varela, Niditch, Hensley-Maloney, Moore, & Creveling, 2013).

The self-image of clinically anxious youth is one of being less able to manage emotion-laden situations (Varela et al., 2013). Strong family orientation and cohesiveness may facilitate Hispanic youths' sense of belonging and increase the ability to cope successfully with psychosocial stressors (Varela, Sanchez-Sosa, Biggs, & Luis, 2009). Cultural factors such as familismo may have contributed to the negative relationship of engagement, learning strategies, sense of belonging, and social awareness with school discipline for Hispanic students. Critical race theory challenges normalized, White, Eurocentric values that oppress peoples of color in legal and education systems (Hiraldo, 2019; McCoy & Rodricks, 2015; Zorn, 2018). By exploring the role of experiential knowledge and counterstorytelling of peoples of color within the context of the Panorama Social-Emotional Learning Survey leaders and researchers can extend the culturally relevant application of survey data.

Engagement was significantly related to both ISS and OSS for White students, as was the case for Hispanic students (see Chapter 4 for detailed information. Engagement scores were

significantly greater for both Black and Hispanic students than for White students. The results regarding relationships between social-emotional learning scales and school discipline for each racial identity group extended the knowledge base of the present literature by identifying specific negative relationships for Hispanic and White students. The findings of all research questions warrant further investigation into the specific role of engagement in learning, particularly for students of color.

Sense of Belonging

Sense of belonging was greater for Black students than for White students and associated with discipline for Hispanic students, raising the possibility that increasing sense of belonging for students of color may decrease school discipline. The implication is consistent with the literature on the concept of connectedness (Anyon et al., 2016). Connectedness has been identified in the literature as a factor predictive of school discipline (Anyon, et al., 2016). The extent to which connectedness and sense of belonging are similar constructs and the extent to which sense of belonging can predict school discipline warrants research.

Engagement

Engagement and self-efficacy improve job performance (Alessandri, Borgogni, Schaufeli, Caprara, & Consiglio, 2015), while educational engagement has been found to be positively associated with academic achievement for low socio-economic kindergarten through eighth-grade students (Penner, 2018). Among secondary students, support from adults and peers, opportunities for student choice, and external incentives aligned with greater engagement. Strict disciplinary structure, irrelevant or boring curriculum, disengaged peers, and lack of respect from adults aligned with greater disengagement (Fredricks, Parr, Amemiya, Wang, & Brauer, 2019).

Sense-making is a teaching practice that supports student engagement for diverse learners (Fitzgerald & Palincsar, 2019). Further investigation into relationships between engagement and school discipline for all racial identity groups can supply further insight into the results of research questions three, four, and five.

According to critical race theory, developing potential solutions to racism requires an understanding of the phenomenon from the perspective of the disempowered (Simson, 2014). The student version of the Panorama Social-Emotional Learning Survey provides student self-assessment data from which leaders and researchers can differentiate interventions based on the common and unique assessed strengths and needs of students by racial identity when disaggregated. Differences in discipline and engagement between students of color and White students and the identified relationship between engagement and discipline for Hispanic and White students warrants further research. The question of whether the Panorama Social-Emotional Learning Survey engagement and sense of belonging scales have the potential to be predictive of school discipline calls for additional research. Educators hoping to reduce the discipline gap for students of color would be well-advised to implement school-based strategies designed to increase Panorama Social-Emotional Learning Survey engagement and sense of belonging scores for each racial group, though the school-based strategies are likely to vary according to cultural relevance.

Limitations

The methodology presented limits to internal and external validity. The limits of using historical data were discussed in the methodology chapter. The use of historical data prevented the ability to gather population data with equitable group sizes and the ability to control the

conditions of data collection, which limited internal validity and reliability. Limited internal validity resulted in a significantly smaller population group size for Black students than for Hispanic and White students.

The scope of the study was limited to 626 Black, Hispanic, and White third-grade to fifth-grade students in six elementary schools in one large, urban school district in Colorado. The scope of the study likely limited external validity or the ability to generalize the findings to other students, schools, or school districts beyond the population included in the study. The failure of the population data to meet assumptions of normal distribution resulted in a change from parametric to non-parametric testing, which prevented generalization of the findings beyond the population under student. External validity was limited by a sampling strategy that required the inclusion of all students with discipline data before randomizing the selection of the remaining sample. Modified random sampling resulted in a sample of 3 groups of 70 Black, 70 Hispanic, and 70 White students, which were representative of the population by grade and gender and which included all discipline data for each group with a frequency greater than zero. The comparative, relational design precluded the ability to claim causal relationships between the independent variable of racial identity and the dependent variables of school discipline and social-emotional learning scores.

Recommendations

Researchers and education leaders continue to carry the responsibility of uncovering knowledge and insight and applying new learning to equity-based educational leadership. The literature review revealed the need for additional research on methods for mitigating the racial discipline gap. Additional research is recommended as a result of the findings of the study.

Further Research

Further research addressing the limitations of the present quantitative, comparative, relational study which used cross-sectional data may continue to develop the knowledgebase. The present study was limited to 626 third-grade to fifth-grade students in six elementary schools in one large, urban school district in Colorado, which likely limited the generalizability of the findings. Future researchers can improve upon the generalizability of the results by replicating the study with broader representation in a variety of locales. Random sampling with a larger population may improve the generalizability of findings, as random sampling increases the likelihood of characteristics between the sample and the population being due to chance and not selection bias (Frey, 2018).

The associations between school discipline and Panorama Social-Emotional Learning Survey scores may be further clarified using causal and qualitative or mixed methods designs. Causal research could examine the extent to which social-emotional learning competencies are causal factors in school discipline. Further quantitative research should include controls for data collection and random sampling with an extended population to include secondary students, where the racial discipline gap becomes more pronounced with grade progression (Goplan & Nelson, 2019). Linear regression could confirm, disconfirm, or extend the present findings to include the ability of engagement and sense of belonging to serve as predictors of discipline.

Qualitative studies could contribute to the knowledge base by exploring the role of cultural factors such as experiential learning, and social justice factors, such as counterstorytelling and minority threat hypothesis, in discipline rates and social-emotional learning outcomes. Interviews could add depth and complexity to students' voices, which are

missing in the study. Incorporating longitudinal data may contribute a new understanding to the differences and relationships between variables. While the study only explored the relationship between social-emotional learning and school discipline, researchers may consider extending the study of the relationship between Panorama Social-Emotional Learning Survey data to a variety of forms of educational data associated with high school dropout by racial identity. Other forms of data may include attendance and course performance (McKee & Caldarella, 2016).

Policy and Practice

Recommendations for changes to practice and policy result from credible research. The results of the present study and future related research may provide the foundation for identifying trends in relationships between variables, early warning indicators, and preventive interventions. Educators are well-advised to exercise caution in planning interventions based solely on the results of the Panorama Social-Emotional Learning Survey. Responsible educators are advised to use best practices in data analysis, including triangulation and disaggregation of Panorama Social-Emotional Learning Survey data with a blending of relevant quantitative and qualitative data. Additional data may allow for the consideration of cultural and racial contexts within an MTSS framework to design data-informed responses to social-emotional learning needs in all tiers.

Triangulation is an iterative process of seeking, assessment, and sense-making, usually resulting in a plan of action (Greyson, 2018). In contemporary urban and complex settings, decision-makers face challenges in making sense of large quantities of information (Greyson, 2018), while running the risk of ignoring important information when sufficient data is not considered. Educators who use Panorama Social-Emotional Learning Survey data run the risks

of ignoring important environmental and cultural factors impacting survey outcomes when used in isolation, while educators simultaneously risk information overload when not judicious in choosing sources of data for triangulation.

The failure of educators to consider racial or cultural identity in data analysis can lead to damaging consequences for students. Neglecting to disaggregate data is akin to the racist colorblind philosophy discussed in the literature review (Roegman, Samarapungaven, Maeda, & Johns, 2019). A recommendation for policymakers is to supply guidance on best practices and ethical considerations in the culturally responsive analysis and use of data within the MTSS framework.

Ethical Considerations

An ethical issue for consideration by researchers who consider building upon the study is the reliability of discipline data due to implicit bias. Educator implicit bias inequitably impacts discipline referral rates for students of color (Assari, 2018; Campbell, 2015; Chestnut et al., 2018; Okonofua & Eberhardt, 2015; Rukavina et al., 2019). A recommendation for researchers is to control for implicit bias or take care to clearly communicate the role of implicit bias in results reflective of racial disparities. Ethical and culturally responsive researchers and other data users should avoid interpretations that place the blame for any disproportion on disempowered populations.

The study used archival data instead of a design involving human subjects. Future research, which includes controlled Panorama Social-Emotional Learning Survey data collection, should consider research procedures which include human subjects according to the guidelines of the Basic Health and Human Services Policy for Protection of Human Research Subjects (United

States Department of Health and Human Services, 2018b), including informed consent and safeguards for working with a vulnerable population. In supplying informed consent, researchers may need to consider the potential impact of and response to opting out, in the event children or guardians decline to participate. Researching across multiple districts and states may require a variety of agency or state safeguards and permission processes.

Implications for Leadership

Decision-making by education leaders who strive for social justice is driven by values aligned with the community's beliefs, personal and organizational ethical principles, decision analysis, critical reflection, group discernment, and incremental and continuous decisions (DeMatthews et al., 2015). These decision-making components are supported by the essential leadership skills of strategic thinking, leading group work, project management, surveying stakeholders, and effective communication (DeMatthews et al., 2015). Social-justice minded leaders include the tenets of critical race theory in decision-making, including the permanence of racism, the value of counter storytelling, interest convergence theory, the complex impact of intersectionality, whiteness as property, and the critique of racism in liberalism (McCoy & Rodricks, 2015).

Transformational leaders identify and execute needed change with committed followers and inspire followers to rise above self-interest by implementing change for the greater good (Deschamps, 2016). Transformational and social justice leaders strive to challenge the status quo to bring justice to the disempowered (Jayavant, 2016; Moodly & Toni, 2017). The findings of the study present implications for education leaders to take social justice action through the lenses of critical race theory and transformational leadership theory.

Culturally Responsive Use of Data

Contrary to much of the literature on the racial discipline gap, the study did not confirm disproportionate discipline for Black or Hispanic students. The finding does not imply a lack of racism in the education system. Leaders who strive for social justice based on the tenets of critical race theory assume racism is inherent in all systems created by a dominant class (McCoy & Rodricks, 2015) and use a variety of disaggregated and triangulated data to root out and confront signs of inequity wherever such injustice may arise in policy or practice, as advocated and demonstrated in multiple studies (Crawford, Walker, & Valle, 2018; Payton et al., 2018; Wiemelt & Welton, 2015). Educators should use disaggregated and triangulated Panorama Social-Emotional Learning Survey data to identify the strengths of students of color and raise the evidence of strength in advocacy against the implicit bias of others. A recommendation is for educational leaders striving for social justice to engage in critical self-reflection on the leader's role in perpetuating inequity through action or inaction. Socially-just leaders should use data in challenging implicit bias and deficit-based thinking in themselves and others by consciously using data to identify and capitalize on strengths and minimize gaps for students of color.

The following recommendations can serve as a foundation for culturally responsive use and application of social-emotional learning data within the context of MTSS to close the discipline gap for students of color. When collecting data, transformative and socially-just leaders create systems in which data collection instruments are presumed to contain cultural bias. Leaders are advised to collect a variety of data types, including data that honors student voice and provides an avenue for counterstorytelling. Recommended data analysis procedures include disaggregation and triangulation of attendance, behavior, and course performance data while

considering the whole student based through the lens of intersectionality. Socially-just leaders will also actively work to overcome deficit-mindsets by consciously leading communities in using data to identify strengths of students of color.

In the use of data, leaders should critically reflect on the impact of personal identity, power, and privilege on implicit bias and decision-making and engage decision-making through group discernment, which offers broad stakeholder representation. Leaders must also build the capacity of staff to engage in the culturally responsive use of data. Leaders should provide professional learning opportunities, such as coaching in the disaggregation and triangulation of data, the identification of gaps, the implementation of targeted interventions, and teachers' critical reflection on gaps among racial groups in professional learning communities. Of specific relevance to the study's findings, leaders are advised to support teachers in identifying and responding to trends in data on engagement and sense of belonging in relation to school discipline by race. Responding to data trends should include goal setting, implementation of interventions, and progress monitoring within the MTSS model.

Instructional Leadership

Engagement is presented as a theme across research questions. Student engagement in learning increases academic performance and decreases misconduct (Billingsley, 2016; Olivier, Archambault, De Clercq, & Galand, 2019; Ribeiro, Rosário, Núñez, Gaeta, & Fuentes, 2019). Instructional leaders should provide instructional staff with professional learning opportunities in culturally responsive instructional strategies that engage diverse students. To honor the voices of disempowered community members, leaders can develop accountability measures for the implementation of best practices in collaboration with diverse stakeholders. Collaboratively

developed accountability measures can be implemented in conjunction with an ongoing system of teacher feedback and coaching. Disaggregated and triangulated discipline data, social-emotional learning data, and course performance data can serve as measures of progress as to whether increased engagement results in improved learning and behavior for racial groups.

Sense of belonging was relevant to Black and Hispanic students. Leaders should assess the sense of belonging of students of color in schools and engage diverse students, staff, and community members in setting goals to maximize sense of belonging for students of color to improve schools' inclusiveness and decrease office discipline referrals. Sense of belonging was measured by students' perception of receiving respect from others at school and being connected to an adult at school (Panorama Education, 2016a). Educational leaders must include students of color in setting goals, determining interventions, and progress monitoring efforts to improve students' perceptions of mutual respect and student-teacher relationships to increase sense of belonging and close discipline gaps for students of color.

Conclusion

Students of color in the United States have received school disciplinary consequences with greater frequency and severity than White students (DeMatthews, 2016; Goplan & Nelson, 2019; United States Department of Education, 2018a). Inequity in outcomes, known as the school-to-prison pipeline, have included less academic success, stricter school consequences, higher dropout rates, and disproportionate involvement in the criminal justice system for students of color compared to White students (McCarter, 2017; Redfield & Nance, 2016). The extent of the racial discipline gap has been rooted in the prevalence of reliance on subjective office discipline referrals. Disproportionality in subjective office discipline referrals, such as

insubordination, has explained the vast majority of variance in total disproportionality in office discipline referrals for Black, Hispanic, and Native American students (Girvan et al., 2017).

The school-to-prison pipeline has been perpetuated by racist structures within the education system such as segregation resulting from the charter school movement (Brooke, 2015; Martin & Varner, 2017; McWilliams, 2017), implicit bias (Assari, 2018; Campbell, 2015; Chestnut et al., 2018; Okonofua & Eberhardt, 2015; Rukavina et al., 2019), colorblindness (Joseph et al., 2016), microaggression (Beaulieu, 2016; Locke & Trolan, 2018; Payton et al., 2018; Proctor et al., 2016; Tachine et al., 2017), and meritocracy (Tefera et al., 2019). Promoting the academic, social-emotional, and behavioral development of all students is essential to reducing unequal discipline (Gregory et al., 2016a). Multi-tiered systems of support are a framework with the potential to guide the work of educators committed to the success of all students (Eagle et al., 2015; Mellard, 2017). Many researchers have found the blending of MTSS and social-emotional learning can support positive outcomes for all students (Adelman & Taylor, 2010; Barnett, 2019; CASEL, 2018; Saeki et al., 2011). Additional research quantifying the results of efforts to use social-emotional learning strategies within an MTSS framework to close the discipline gap has been needed. The study has supported the disaggregation of universal screener data by racial identity as a promising approach for educators and researchers in identifying opportunities to disrupt the school discipline cycle for racially and ethnically diverse students (Blake et al., 2016).

The problem has been standardized social-emotional learning universal screeners have not provided educators with sufficient information to implement interventions to close the discipline gap for Black and Hispanic students in the United States. Prior to the current study, no

known research existed which addressed the culturally responsive use of social-emotional learning universal screeners to address the racial discipline gap for students of color. The purpose of the quantitative, comparative, relational study was to identify any statistically significant differences in the frequency of school discipline and social-emotional learning universal screener scores of Black, Hispanic, and White students and which, if any, social-emotional learning scales were related to the frequency of school discipline for each of these groups in a large, urban school district in Colorado.

The population of 626 third-grade to fifth-grade students from 6 elementary schools was stratified by racial group into sample groups of 70 Black students, 70 Hispanic students, and 70 White students. The Kruskal-Wallis *H*-tests with post hoc Mann-Whitney *U*-tests identified lesser frequency in OSS for Hispanic and Black students as compared to White students. Greater mean scores were identified in engagement for Black and Hispanic students as compared to White students. The Pearson Chi Square test detected a significant relationship between engagement and OSS and ISS for both Hispanic and White students. Sense of belonging was greater for Black students than for White students and associated with discipline for Hispanic students. Literature has supported grade level, English speaking status, minority threat hypothesis, and the critical race theory (Bell, 1995) principle of interest convergence as factors with the potential to positively impact discipline equity (Burke, 2015; Ousey & Unnever, 2012; Rector-Aranda, 2016; Vincent et al., 2012), which may help to explain the findings of lesser frequency of OSS for students of color than for White students and greater scores in engagement for Black and Hispanic students and sense of belonging for Hispanic students than for White students. In a school district where students of color out-number White students, incidents where

minority students perform more favorably than White students should be further studied to identify contributing factors to success.

The alignment of MTSS and school counseling efforts, such as the use of social-emotional learning universal screener data, presents an opportunity for schools to promote equitable academic and social-emotional learning outcomes for all students by advancing the cultural responsiveness of educators (Belser et al., 2016; Bohanon et al., 2016; Goodman-Scott et al., 2016; Sink & Ockerman, 2016). The identification of multiple relationships between social-emotional learning and school discipline in research questions four and five support the assertion of potential benefits in using social-emotional learning universal screener data to promote equity in school discipline.

Through the lenses of transformational leadership theory and critical race theory, recommendations included the culturally responsive use of data in MTSS and the confrontation of racism in the education system. Implications for leadership included facilitating educators' culturally responsive use of data and professional development in and implementation of culturally responsive instruction and culture building to engage diverse learners and increase their sense of belonging. With the use of disaggregation and triangulation of discipline data, social-emotional learning data, and course performance data in conjunction with culturally relevant instructional strategies within an MTSS framework, educators may make progress in overcoming racist structures in education and closing the discipline gap for students of color.

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Appendix A

Operational Definitions of Social-Emotional Learning Scales

Scale	Definition
Compassion	No definition provided
Emotion Regulation	How well students regulate emotions
Engagement	How invested and attentive students are in school
Grit	How well students persevere through setbacks to achieve goals
Learning Strategies	How well students use strategies to manage the learning process
Self-Efficacy	How much students believe in the ability of self to succeed in achieving academic outcomes
Self-Management	How well students manage emotions, thoughts, and behaviors
Sense of Belonging	How much students feel valued at school
Social Awareness	How well students consider the perceptions of and empathize with others

Note. The table provides definitions for each of nine scales of social-emotional learning as operationalized in the User Guide: Panorama Social Emotional Learning Survey by Panorama Education, copyright 2016, and implemented by a large, urban school district in Colorado in fall 2018. The listed scales are nine of 23 total scales offered to school districts by Panorama Education to measure student competencies, student supports and environment, and teacher skills and perceptions.

Appendix B

Panorama Social-Emotional Learning Survey

Compassion

When you see people at school who need help, how often do you try to help them?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

When people at school seem upset, how concerned do you get?

Not at all concerned	Slightly concerned	Somewhat concerned	Quite concerned	Extremely concerned
----------------------	--------------------	--------------------	-----------------	---------------------

When you see people outside of school who need help, how often do you try to help them?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

When people outside of school seem upset, how concerned do you get?

Not at all concerned	Slightly concerned	Somewhat concerned	Quite concerned	Extremely concerned
----------------------	--------------------	--------------------	-----------------	---------------------

Emotion Regulation

How often are you able to pull yourself out of a bad mood?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

When everybody around you gets angry, how relaxed can you stay?

Not relaxed at all	Slightly relaxed	Somewhat relaxed	Quite relaxed	Extremely relaxed
--------------------	------------------	------------------	---------------	-------------------

How often are you able to control your emotions when you need to?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

Once you get upset, how often can you get yourself to relax?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

When things go wrong for you, how calm are you able to stay?

Not calm at all	Slightly calm	Somewhat calm	Quite calm	Extremely calm
-----------------	---------------	---------------	------------	----------------

Engagement

How excited are you about going to this class?

Not at all excited	Slightly excited	Somewhat excited	Quite excited	Extremely excited
--------------------	------------------	------------------	---------------	-------------------

How focused are you on the activities in this class?

Not at all focused	Slightly focused	Somewhat focused	Quite focused	Extremely focused
--------------------	------------------	------------------	---------------	-------------------

In this class, how excited are you to participate?

Not at all excited	Slightly excited	Somewhat excited	Quite excited	Extremely excited

When you are not in school, how often do you talk about ideas from this class?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

How interested are you in this class?

Not at all interested	Slightly interested	Somewhat interested	Quite interested	Extremely interested
-----------------------	---------------------	---------------------	------------------	----------------------

Grit

How often do you stay focused on the same goal for more than 3 months at a time?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

If you fail at an important goal, how likely are you to try again?

Not at all likely	Slightly likely	Somewhat likely	Quite likely	Extremely likely
-------------------	-----------------	-----------------	--------------	------------------

When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?

Not at all focused	Slightly focused	Somewhat focused	Quite focused	Extremely focused
--------------------	------------------	------------------	---------------	-------------------

If you have a problem while working towards an important goal, how well can you keep working?

Not well at all	Slightly well	Somewhat well	Quite well	Extremely well
-----------------	---------------	---------------	------------	----------------

Learning Strategies

When you get stuck while learning something new, how likely are you to try to learn it in a different way?

Not at all likely	Slightly likely	Somewhat likely	Quite likely	Extremely likely
-------------------	-----------------	-----------------	--------------	------------------

How sure are you that you can figure out a good way to get your schoolwork done well?

Not at all sure	Slightly sure	Somewhat sure	Quite sure	Extremely sure
-----------------	---------------	---------------	------------	----------------

Before you start on a challenging project, how often do you think about the best way to do it?

Almost never	Once in a while	Sometimes	Frequently	Almost always
--------------	-----------------	-----------	------------	---------------

Overall, how well can you figure out how to learn things?

Not well at all	Slightly well	Somewhat well	Quite well	Extremely well
-----------------	---------------	---------------	------------	----------------

Self-Efficacy

How sure are you that you can complete all the work that is assigned in your classes?

Not at all sure	Slightly sure	Somewhat sure	Quite sure	Extremely sure
-----------------	---------------	---------------	------------	----------------

When complicated ideas are discussed in class, how sure are you that you can understand them?

Not at all sure	Slightly sure	Somewhat sure	Quite sure	Extremely sure
-----------------	---------------	---------------	------------	----------------

How sure are you that you can learn all the topics taught in your classes?

Not at all sure	Slightly sure	Somewhat sure	Quite sure	Extremely sure
-----------------	---------------	---------------	------------	----------------

How sure are you that you can do the hardest work that is assigned in your classes?

Not at all sure	Slightly sure	Somewhat sure	Quite sure	Extremely sure
-----------------	---------------	---------------	------------	----------------

How sure are you that you will remember what you learned in your current classes next year?

Not at all sure	Slightly sure	Somewhat sure	Quite sure	Extremely sure
-----------------	---------------	---------------	------------	----------------

Self-Management – During the past 30 days...

How often did you come to class prepared?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often did you follow directions in class?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often did you get your work done right away, instead of waiting until the last minute?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often did you pay attention and ignore distractions?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

When you were working independently, how often did you stay focused?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often did you remain calm, even when someone was bothering you or saying bad things?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often did you allow others to speak without interrupting them?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often were you polite to adults?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often were you polite to other students?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How often did you keep your temper under control?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

Sense of Belonging

How well do people at your school understand you as a person?

Do not understand at all	Understand a little	Understand somewhat	Understand quite a bit	Completely understand
--------------------------	---------------------	---------------------	------------------------	-----------------------

How much support do the adults at your school give you?

No support at all	A little bit of support	Some support	Quite a bit of support	A tremendous amount of support
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How much respect do students at your school show you?

No respect at all	A little bit of respect	Some respect	Quite a bit of respect	A tremendous amount of respect
-------------------	-------------------------	--------------	------------------------	--------------------------------

Overall, how much do you feel like you belong at your school?

Do not belong at all	Belong a little bit	Belong somewhat	Belong quite a bit	Completely belong
----------------------	---------------------	-----------------	--------------------	-------------------

Social Awareness – During the past 30 days....

How carefully did you listen to other people's points of view?

Not carefully at all	Slightly carefully	Somewhat carefully	Quite carefully	Extremely carefully
----------------------	--------------------	--------------------	-----------------	---------------------

How much did you care about other people's feelings?

Did not care at all	Cared a little bit	Cared somewhat	Cared quite a bit	Cared a tremendous amount
---------------------	--------------------	----------------	-------------------	---------------------------

How often did you compliment others' accomplishments?

Almost never	Once in a while	Sometimes	Often	Almost all the time
--------------	-----------------	-----------	-------	---------------------

How well did you get along with students who are different from you?

Did not get along at all	Got along a little bit	Got along somewhat	Got along pretty well	Got along extremely well
--------------------------	------------------------	--------------------	-----------------------	--------------------------

How clearly were you able to describe your feelings?

Not at all clearly	Slightly clearly	Somewhat clearly	Quite clearly	Extremely clearly
--------------------	------------------	------------------	---------------	-------------------

When others disagreed with you, how respectful were you of their views?

Not at all respectful	Slightly respectful	Somewhat respectful	Quite respectful	Extremely respectful
-----------------------	---------------------	---------------------	------------------	----------------------

To what extent were you able to stand up for yourself without putting others down?

Not at all	A little bit	Somewhat	Quite a bit	A tremendous amount
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To what extent were you able to disagree with others without starting an argument?

Not at all	A little bit	Somewhat	Quite a bit	A tremendous amount
------------	--------------	----------	-------------	---------------------

Appendix C

Permission to Conduct Research Letter

Colorado Springs
School District 11
Educational Data and Support Services

1033 North Franklin Street
Colorado Springs, CO 80903

Inspire Every Mind

(719) 520-2252
david.khalqi@d11.org

January 16, 2020

Dear Institutional Review Board:

The purpose of this letter is to inform you that the Colorado Springs School District 11 External Research Review Board in the office of Educational Data and Support Service grants Shala Parker permission to conduct the research titled *A Descriptive, Correlational Study of Social-Emotional Learning and School Discipline by Racial Identity* utilizing district archival data.

This also serves as assurance that this research complies with requirements of the Family Educational Rights and Privacy Act (FERPA) and the Protection of Pupil Rights Amendment (PPRA) and will ensure that these requirements are followed in the conduct of this research.

Sincerely,

A handwritten signature in cursive script that reads 'David Khalqi'.

David Khalqi, PhD

Executive Director, EDSS

Office of the Superintendent

1115 N. El Paso Street

Colorado Springs, CO 80903

We dare to empower the whole student to profoundly impact our world

Appendix D

Request to Conduct Research Cover Sheet

Request to Conduct Research Coversheet Colorado Springs School District 11 Research Review Board	
I. Background	
Date _____	
Title of the Study: _____	
Name of Researcher: _____	Phone: _____
Institution of Researcher: _____	
D11 Employee: YES NO If YES, School or Department _____	
Street address: _____	City: _____ State: _____ Zip: _____
E-mail: _____	
D11 Sponsor of the Study: _____	Department: _____
Indicate what type of data the researcher will collect:	
<input type="checkbox"/> Primary Data ¹	<input type="checkbox"/> Secondary Data ² <input type="checkbox"/> Both
Indicate which of the following individuals will participate in the study (<i>Mark all that apply</i>):	
<input type="checkbox"/> Students	<input type="checkbox"/> Teachers <input type="checkbox"/> Other: _____
Is the researcher willing to include D11 as co-author in publications that might results from this study? YES NO	
I agree that the District and D11 Sponsor have the right to review publications prior to release. YES NO	
Approximate date on which results will be submitted to D11 _____	
II. Application Checklist	
Please complete the Research Request Application Checklist. All documentation <u>must be completed</u> prior to submitting for external review.	
III. Agreement	
If granted permission to conduct this research in the Colorado Springs School District 11 schools, I agree to follow the guidelines for conducting research as described in the External Research Request Handbook.	
Signature of Researcher _____	Signature of Research Supervisor (if applicable) _____
¹ Primary data- data that has not already been collected; the researcher will actively participate in the data collection process ² Secondary data- data that D11 maintains; the researcher has no involvement in the data collection process. Secondary data, including student-level and aggregate unsuppressed (showing less than 16 students per group), will require a signed and executed Data Protection Agreement.	

Appendix E

Research Request Application Checklist

Research Request Documentation	Completed Documentation		Comments
	Y	N	
Cover Sheet	<input type="checkbox"/>	<input type="checkbox"/>	
Executive Summary (500 Words or Less)	<input type="checkbox"/>	<input type="checkbox"/>	
Project Title	<input type="checkbox"/>	<input type="checkbox"/>	
Researcher Status and Title	<input type="checkbox"/>	<input type="checkbox"/>	
Statement of Purpose	<input type="checkbox"/>	<input type="checkbox"/>	
Research Problem	<input type="checkbox"/>	<input type="checkbox"/>	
Alignment to D11 areas of research interest	<input type="checkbox"/>	<input type="checkbox"/>	
Research Question	<input type="checkbox"/>	<input type="checkbox"/>	
Hypothesis	<input type="checkbox"/>	<input type="checkbox"/>	
Benefit/Cost to D11 and/or profession of education	<input type="checkbox"/>	<input type="checkbox"/>	
Research Sponsorship			
D11 Sponsor statement of support (for multiple school sites)	<input type="checkbox"/>	<input type="checkbox"/>	
Principal Consent Form (for school sites where research is happening; considered sponsor if research includes only one school site)	<input type="checkbox"/>	<input type="checkbox"/>	
Method			
Sample (e.g., population and procedure for selecting the sample)	<input type="checkbox"/>	<input type="checkbox"/>	
Data collection methods	<input type="checkbox"/>	<input type="checkbox"/>	
Data Protection Agreement for secondary data (if applicable; for secondary data only)	<input type="checkbox"/>	<input type="checkbox"/>	
Time Requirement Form - time required of participants (if applicable; for primary data only)	<input type="checkbox"/>	<input type="checkbox"/>	
Instruments	<input type="checkbox"/>	<input type="checkbox"/>	
Method for analyzing results	<input type="checkbox"/>	<input type="checkbox"/>	

Research timeline	<input type="checkbox"/>	<input type="checkbox"/>	
Human Subjects Protection			
IRB approval documentation (required)	<input type="checkbox"/>	<input type="checkbox"/>	
Procedures to ensure confidentiality	<input type="checkbox"/>	<input type="checkbox"/>	
Benefit, compensation, and risk to participants	<input type="checkbox"/>	<input type="checkbox"/>	
Consent Letters (if study requires direct contact)	<input type="checkbox"/>	<input type="checkbox"/>	
Informed Consent (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	
Principal Consent Form (if study requires direct contact)	<input type="checkbox"/>	<input type="checkbox"/>	
Documentation, Funding, and Dissemination			
D11 Partnership Documentation (e.g., MOU; if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	
Project Funding Description (e.g., grant, contract; if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	
Dissemination Plan	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix F

D11 Sponsor Statement of Support

<p align="center">D11 Sponsor Statement of Support</p> <p align="center">Colorado Springs School District 11 Research Review Board</p>

I. Research Background (to be completed by researcher)

Title of the Study _____

Name of Researcher _____ Phone _____

Street address: _____ City: _____ State: _____ Zip: _____

E-mail: _____

II. Description of Research Proposal

Researcher is to provide the sponsor with a copy of the executive summary and the time requirement form.

III. Description of Alignment to D11 Priorities

Please summarize: 1) the importance of the proposed research project to you and D11, 2) how you will use the data to inform your work and others, and 3) how the research directly aligns to one of the D11 priority (approximately 250 words).

IV. Timeline for CollaborationFrequency of check-ins with researcher:

Please indicate how often you and the researcher will meet to ensure continued alignment to the proposed research. If this alignment is no longer present or the researcher does not collaborate, please notify EDSS at rrb@d11.org.

Dissemination of findings:

Please indicate when the researcher will be presenting initial and final results to your team to inform their work.

V. Agreement (to be completed by the sponsor)

Please briefly describe how the proposed research will impact the work of your department and ultimately D11 school leaders, teachers, and students. How will the proposed research benefit a policy, program or practice at D11?

I, _____ (name), _____ (title) of _____
_____ (department), support the proposed study, with the understanding that

- the privacy and confidentiality of any staff or student will be protected,
- I have the right to terminate the research study at any time,
- I have the right to review all consent forms and research documents at any time during the study,
- findings from this study will be distributed to me.

☐ I have reviewed the executive summary and the time requirement form, if applicable, of the above named research.

☐ I find the above named research valuable; its findings will be used to inform the work of my department/team.

☐ I understand that data should be released only by the departments that own them. My staff and I shall not release data to the researcher without approval from the RRB.

Signature of D11 Sponsor

Appendix G

Official Permission to Conduct Research

KHALIQUI, DAVID HABIB

Fri 2/21/2020 1:20 PM

PARKER, SHALAH BREL; KEANE, JOHN M.; NOTESTINE, CORY D ✉



Shalah,

Thank you for your completed submission to the Colorado Springs School District 11 Research Review Board. This email serves as confirmation that your study:

A COMPARATIVE, CORRELATIONAL STUDY OF SOCIAL-EMOTIONAL LEARNING AND
SCHOOL DISCIPLINE BY RACIAL IDENTITY
RRB PROTOCOL #: 20-107

Has been approved to begin in D11 with district sponsor: JOHN KEANE
EFFECTIVE DATE: 2/21/2020

Please feel free to reach out to me with any further questions. Good luck with your study.

David Khaliqi, PhD

Executive Director of Educational Data & Support
Services

1033 N. Franklin St.

Colorado Springs, CO 80903

719-520-2347

david.khaliqi@d11.org |<https://www.d11.org/domain/541>

Colorado Springs
School District 11

Educational Data and Support Services