

THE RELATIONSHIP BETWEEN TEACHERS' CULTURAL COMPETENCE AND  
REFERRALS FOR MULTITIERED SYSTEM OF SUPPORTS AMONG  
RACIAL/ETHNIC MINORITY STUDENTS

BY

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## TEACHERS' CULTURAL COMPETENCE

**DEDICATION**

I dedicate this study in honor of my late grandmother, Violet May Breakenridge. Thank you for all you have done for me and all you have sacrificed for this family. I miss you every day, but I hope I have made you proud.

I dedicate this study to my mother, Colleen Drake. What would I do without you? Who would I be without you? Thank you for always encouraging me. Thank you for recognizing my passion for learning and my love for school at an early age. Thank you for your resiliency and leading by example, teaching me to be strong, independent, and to always finish what I start. You have sacrificed so much for me to be here, and have always celebrated all of my milestones, no matter how big or small. I am, because you are. I love you!

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## TEACHERS' CULTURAL COMPETENCE

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### ABSTRACT

The current study examined the relationship between teachers' cultural competence and Multitiered System of Supports (MTSS) referrals for students belonging to racial/ethnic minority groups. Teachers serving grades kindergarten through five in two schools in a large, urban school district in Connecticut participated in the study. MTSS referrals were examined across three academic years. The MTSS framework addresses both academic and behavioral concerns; both types of referrals were addressed in this study. Cultural competence was measured in two ways: cultural competence training and a self-report questionnaire. The results indicated no significant relationships between teachers' cultural competence training experiences and MTSS referrals, teachers' cultural competence and MTSS referrals, and teachers' cultural competence and the timing of MTSS referrals within the academic year. However, limitations were discussed, including barriers in methodology (i.e., measuring cultural competence) and the small sample size. Additionally, areas for further research were identified, especially as it relates to the MTSS framework, teachers' cultural competence training, and professional development in the field for cultural competence. Overall, teachers' training experiences continue to be an area of difficulty to assess. Training experiences rooted in multiculturalism remain an area of need and development for teachers, both pre- and in-service. Future research can be conducted in order to further explore the relationship between teachers' cultural competence and their MTSS referrals, as well as the MTSS process in schools, as educators continue to learn about and operate within this framework.

## **Chapter I: Introduction**

Some racial and ethnic groups are overrepresented in special education, indicating that they include a disproportionate percentage in special education programs or specific special education classifications than is expected based on their proportional enrollment in the general education setting (Blanchett, 2006). Overrepresentation of ethnic minority students in special education is a longstanding issue in education and has been widely debated across academic fields for decades (Albrecht et al., 2011; Daniels, 1998). If the representation of various groups is not proportionate across both the general education and special education settings, disproportionality is said to occur as a result of discrimination or some systemic issue in education, such as inappropriate special education referrals (Daniels, 1998; MacMillan & Reschly, 1998). Moreover, research indicates that disproportionality affects other school-related factors, including graduation rates, school dropouts, and suspension and expulsion rates (Bryan et al., 2012).

As early as the 1960s, studies and articles were published discussing this concern, including working theories behind its cause and ideas for improvement in the future. For instance, in his groundbreaking article on special education, Lloyd Dunn (1968) reported that African Americans, American Indians, and Hispanics/Latinos were the majority of the special education population, despite comprising a small percentage of students in the general education population. Ideally, these ethnic minority groups should also comprise a small portion of the special education population. Dunn's critical analysis of special education targeted the overrepresentation of students of color, particularly in specific educational classifications (e.g., intellectual disability). He reported that students were often classified as having an intellectual or learning disability while little consideration

was given for the impact of trauma and low socioeconomic status (i.e., poverty) on a student's learning profile and cognitive development. Dunn also argued that the educational classification resulted in useless and stigmatizing labels that followed these children throughout their educational careers. Two years later, Evelyn Deno (as cited in Artiles & Trent, 1994) expanded upon Dunn's findings in an article that addressed the incorrect use of special education programs, calling for an analysis of conceptual models used in education. Despite both authors providing suggestions for change, along with proposed solutions from researchers throughout the years, issues related to disproportionality continue to plague the education system in the U.S. (Albrecht et al., 2011; Blanchett, 2006; Bryan et al., 2012; MacMillan & Reschly, 1998).

In recent years, another facet of disproportionality has been explored--the underrepresentation of certain groups in special education. One study sparked debate when researchers reported that ethnic minority students are actually less likely to be referred for specialized services than their White peers (Morgan et al., 2015; Morgan et al., 2017), which directly contradicted decades of research. Other professionals (Cohen et al., 2015; Phippen, 2015) have shared their disagreement with the findings, especially considering the limitations of the study. Limitations included lack of application to high school, as the data ended at the eighth grade level; being unable to address whether changes in federal laws impacted disability identification rates; possibly excluding children belonging to a language minority group; lack of identification of factors that caused observed discrepancies; the potential impact of other confounding variables that could explain the outcomes of the study; and that the study does not evaluate whether special education is considered beneficial. Regarding criticism of the study, Cohen and

colleagues (2015) stated that the methods used in the study were problematic. The researchers controlled for factors such as socioeconomic status, behavioral difficulties, and academic achievement, which Cohen and colleagues argue are tied to being an African American student in the United States considering historical experiences (i.e., segregation, oppression, low expectations) unique to the racial group. Overall, the field generally seems to still support the conclusion that overrepresentation of ethnic minority groups occurs.

Ideally, students' representation in special education programs or in specific special education classifications should be proportionate to their representation in the general education program (Blanchett, 2006). Therefore, the group with the largest representation in the general population or in the school should also be the group with the largest presence in special education. Research has suggested a variety of reasons that contribute to disproportionality, one of which is cultural mismatch.

### **Cultural Mismatch**

The concept of cultural mismatch in educational settings refers to a difference in racial, ethnic, and cultural backgrounds within the teacher-student pairing (Rogers-Sirin & Sirin, 2009). It has been proposed that teachers should become more well-versed in the needs of their diverse students due to the changing demographics of the United States and the students entering education settings (Keengwe, 2010; Taylor, 2010). The demographics of the United States and students attending its schools are changing, and teacher populations are more diverse now than in the past; however, teachers nationwide remain overwhelmingly White and female (Barnes, 2006; Keengwe, 2010; National Center for Education Statistics, 2017; Rogers-Sirin & Sirin, 2009). Therefore, it is likely

that teachers will have students who have different cultural and racial backgrounds and experiences than their own. These students are likely to belong to diverse racial, ethnic, linguistic, and immigrant families, but are likely to have a teacher who is White and from a nonimmigrant background.

Due to the evolving school-age population, the student is typically the member in the dyad from a culturally-diverse background. The cultural variation between the two members can result in negative outcomes throughout the child's educational career. Furthermore, students from diverse and impoverished backgrounds may not have access to mainstream culture due to a lack of exposure to cognitively stimulating experiences. As a result, they may not have the opportunities to learn to be successful in the school setting (Kearns et al., 2005). This indicates that students may go through their educational careers with a mismatch between their home and school cultures.

It is empirically supported that teacher expectations of diverse students are influenced by a cultural mismatch, which ultimately results in lowered expectations of performance for ethnic minority students (Barnes, 2006; Keengwe, 2010; Rogers-Sirin & Sirin, 2009). For instance, one study found that teachers rated students as having a higher level of achievement when their behaviors were aligned with mainstream, European-American norms, compared to students who demonstrated behaviors and learning styles associated with Afrocentric norms (Tyler et al., 2006). Another study was conducted to examine factors that influenced teachers' perceptions of educational attainment of low-income Black and Hispanic students (Mahatmya et al., 2016). The results indicated that the majority of teachers maintained lower perceptions of future educational attainments (i.e., academic achievement) for their low-income Black and Hispanic students. These

studies indicate that many students of color may continue to be at-risk, not only for their educational outcomes, but also for the quality of education they receive from educators who misunderstand them or misperceive their abilities to do well in school. One way to negate the impact of cultural mismatch is for teachers to develop greater cultural competence.

### **Teacher Cultural Competence**

Cultural competence refers to the skill set and knowledge base required to be effective in various settings with people from diverse backgrounds (Ball, 2010). This term is used interchangeably with *cultural awareness*, *multicultural efficacy*, and, when referring to use in educational settings, *culturally responsive teaching*. However, *cultural competence* may be a preferred term due to its consistent use across various national organizations, specifically those related to professions in mental health and education such as the National Association of School Psychologists (NASP) and the Council for the Accreditation of Educator Preparation (CAEP) (Bustamante et al., 2016; Larson & Bradshaw, 2017).

While overrepresentation in special education can lead to negative school outcomes (e.g., higher suspension and/or expulsion rates), research has also supported that teachers who are culturally responsive, or culturally competent, can have favorable effects on students, such as promoting academic achievement and positive school experiences (Bustamante et al., 2016). Similarly, evidence supports the importance of positive teacher-student relationships (e.g., Hamre & Pianta, 2001) and teachers' cultural competence (Ahram et al., 2011) as they relate to student outcomes.

Cultural competence is relevant to teachers' interpretation and understanding of student behavior. It can be useful in being able to distinguish between behavior that is aligned with a student's culture, or behavior that is maladaptive, and therefore indicative of a clinical issue (Whitcomb & Merrell, 2013). Furthermore, there are several benefits of cultural competence for teachers (e.g., improved student outcomes, fostering positive relationships with students), and research has identified various strategies for improving this skill. For example, Daniels (1998) suggested having a stakeholder, or expert of a particular ethnic/minority group, assist in distributing knowledge of that group. Additionally, stakeholders can reform educational policies and systems that have historically been damaging, especially for students of color. According to Daniels (1998), stakeholders who have developed cultural competence, such as teachers, school psychologists, and administrators, would be valuable in distributing knowledge to best understand student behaviors or skills, especially considering that any misinterpretations may result in inappropriate referrals or a misunderstanding of student abilities.

Cultural competence is regarded as a crucial aspect of educators' professional skills. Research supports several ways to measure cultural competence, especially for the purpose of improving skills or positively impacting student success in school. While finding an appropriate measure has been challenging, there are three ways that are generally discussed: self-report scales, self-reflection, and teacher training experiences. Self-report scales rely on the participant to complete a measure about their cultural competence. Self-reflection may require the participant to consider their own experiences, perhaps through writing about a topic related to cultural competence. Lastly, type of training examines the various ways that teachers build cultural competence

through graduate courses and experiences, such as coursework, field experiences, and presentations.

Cultural competence and awareness can help teachers to assess their own beliefs about their diverse students (Lambeth & Smith, 2016). Cultural competence positively impacts the learning environment (Gay, 2002), and thus, can influence academic outcomes for students. For instance, Lambeth and Smith (2016) found that preservice teachers who participated in a field experience in a culturally responsive classroom tended to feel responsible for learning student interests and personalities, as well as connecting to their students.

Research has also highlighted the importance of teacher cultural competence on behavioral practices with students. One study found that it is important to take a student's ethnic and racial background into account when designing and evaluating discipline practices (Vincent et al., 2012). Vincent and colleagues (2012) found that at both the elementary and middle school level, race/ethnicity was a significant predictor in students' access to behavioral support. Hispanic American and African American students were overrepresented among students who received access to a behavioral intervention program (i.e., *Check-in/Check-out*) compared to their White peers. Nonetheless, the results indicated that despite receiving this support, both Hispanic American and African American students continued to be disproportionately represented in disciplinary (behavioral) incidents. In other words, in most cases, implementation of the program did not result in a decrease in discipline disparity. This implies the need for a critical understanding of the needs of diverse students, especially regarding their behavioral functioning. It can be beneficial to examine the behaviors of these students from a

cultural lens in order to ultimately dissect the underlying causes of behavioral incidents, disciplinary referrals, and behavioral disparities. Overall, cultural competence can be relevant in both academic and behavioral cases.

### **Cultural Competence and Multitiered System of Supports (MTSS) Referrals**

Teachers' cultural competence can influence the number of disciplinary referrals for behavioral infractions, as well as special education referrals due to learning and/or behavioral needs. However, prior to referring students to special education, a multi-tiered, evidence-based approach is currently followed in order to identify students who present with learning and behavioral concerns (RTI Action Network, n.d.). This model is known as the Multitiered System of Supports and integrates both academic and behavioral concerns. Prior to the development of MTSS as a framework in schools, academic and behavioral concerns were addressed by separate structures. Academic concerns were addressed by Response to Intervention (RtI) while behavioral concerns were targeted using Positive Behavior Intervention Supports (PBIS) (Eagle et al., 2015). However, by integrating both models into one framework, multiple interventions and supports can be utilized. MTSS emphasizes prevention and data-based decision making to support student needs, focusing on exhausting resources prior to making a referral to special education.

Response to Intervention (RtI) was designed to be a proactive layer of support intended to address student academic needs, rather than a direct referral to special education. Essentially, RtI interventions should be proactive and individualized for the student's specific needs, allowing school personnel to target these areas for improvement through general education supports.

Tier 1 of RtI targets all students in the general education setting. Students not making adequate academic progress (e.g., not meeting benchmarks) and who encounter difficulty in the general education classroom setting are identified as in need of support and are moved to Tier 2. Students in Tier 2 may receive small-group supports and are given a higher level of intensive services in order to best meet their needs. If they continue to demonstrate minimal progress in Tier 2, these students are moved to Tier 3. At this level, students will receive the highest level of individualized, intensive supports. Students in Tier 3 are referred for a comprehensive evaluation in order to evaluate their strengths and weaknesses, and to determine which specialized supports will best assist in educational progress. The results of the evaluation will be used to determine whether the student is eligible to receive special education services.

While RtI addressed academic concerns, PBIS is used to improve behavioral and social/emotional issues. Both RtI and PBIS utilize a tiered framework. Similar to RtI, Tier 1 of PBIS also targets all students in the general education setting by including strategies for use with this population (e.g., implementation of a schoolwide social skills curriculum). Tier 2 supports are for students who may be at-risk for social/emotional/behavioral issues or who are exhibiting difficulties in these areas. These behaviors may also impact academic progress. Tier 2 supports may include placement in a small group to teach or reinforce specific prosocial skills. Lastly, students who are moved to Tier 3 require individualized, intensive supports. This may include behavioral measures or assessments to gain further understanding of the student's behavioral functioning and target areas for improvement.

***The MTSS Process***

Over the past several years, RtI and PBIS have been implemented as a part of a larger framework known as Multitiered System of Supports (MTSS), which is designed to support both academic and behavioral issues. MTSS is described as a system that provides support to all students, consistently teaching and reinforcing the same social/emotional/behavioral skills (e.g., appropriate hallway behavior) and promoting academic engagement. Throughout the body of this manuscript, academic and behavioral interventions are discussed in the context of the MTSS framework. However, some of the literature reviewed and referred to within this document also reflects research conducted prior to the MTSS framework becoming more prominent in the field of education.

An essential component of the MTSS framework is the pre-referral process. This includes any interventions, supports, and corresponding data gathered about a student prior to an official referral to special education. Within a school system, this process may be initiated by school personnel designated as members of a pre-referral team. Typically, the pre-referral team receives a referral for a student who exhibits academic, behavioral, and/or social-emotional concerns impacting academic performance and/or progress. This referral may come from school staff (e.g., classroom teacher) or from the student's parent/guardian. The pre-referral team will usually conceptualize the case by considering the whole child; this may include information such as the child's health history, academic history, social history, and academic data. The team may meet about the student and discuss the child's presentation, concerns, and devise a plan with targeted areas for improvement. While this part of the process includes hard data, such as grades and progress monitoring data, there are other steps in the pre-referral process that are more

subjective. For instance, a teacher may interpret a behavior differently from another teacher; one may choose to refer the child for additional support, while the other teacher might not. These referrals may be intended to positively influence the child's functioning. Yet, a referral may be inappropriate if impacted by issues such as implicit bias (i.e., stereotypes that one may unconsciously hold and act upon), low expectations for student performance, or misinterpreting behavior. Overall, these issues may be related to cultural competence.

### ***Issues Related to Cultural Competence within the MTSS Process***

Issues related to cultural competence have been observed throughout the MTSS process. When students are referred to MTSS, it is usually due to a behavioral and/or academic problem. Teachers and other professionals regularly engage with and instruct students belonging to racial/ethnic minority groups due to the diverse makeup of the school-aged population. These professionals may hold and act on a belief based on their own biases. These biases, if left unchecked, may contribute to an inappropriate referral to the MTSS process. This may ultimately result in some children being incorrectly identified as having an educational disability. As a result, the MTSS process may involve intersecting factors of lack of cultural competence and biases, inappropriate referrals, and the contribution to disproportionality.

Reyes' case study (2009) found that preservice teachers with lower levels of cultural competence were more likely to make a referral for behavioral concerns for an African American student than a Caucasian student. These results suggest that these teachers may not have been able to best assess the behaviors of students who were from a cultural or ethnic background that was different from their own. The implications for the

teachers' decisions to refer behaviorally challenging students vary. Some of these teachers may unknowingly hold stereotypes about their students' academic abilities (e.g., perceiving African American students as having lesser academic potential) and behavioral functioning (e.g., viewing activity levels of African American students as maladaptive), which may contribute to inappropriate referrals. Equally, a lack of cultural knowledge may also contribute to poor decision-making. Reyes (2009) suggested that teachers' understanding of cultural and ethnic backgrounds is essential in enhancing the learning experience of the students, as well as minimizing overidentification of ethnic minority students with the need for special education. Therefore, culturally-related information seems to be a crucial factor in special education considerations for students of diverse backgrounds. While it has been emphasized for educators to consider cultural factors in understanding students' learning and behavioral profiles, not enough research exists to establish associations between teacher cultural competence and MTSS referrals for students from diverse backgrounds.

### **Current Study**

The current study examined the relationship between teachers' cultural competence and their academic and behavioral referrals for ethnic minority students. The relationship between cultural competence training for teachers and referrals to special education has been empirically supported in a limited amount of research (Reyes, 2009). The MTSS process is now used in schools to target and support student needs before referring to special education. As a fairly new framework, research is still forthcoming on MTSS, especially in considering both cultural competence and referrals. Topics and skills related to diversity have been gaining traction in the field of education, especially

considering the current cultural climate in the U.S. Teachers bear a greater responsibility now, than in years prior, to consider students' cultural experiences in the context of learning. Research demonstrates that cultural competence is essential in understanding students, connecting with students, and supporting their progress in school. Additionally, gaining these skills can help teachers to determine whether MTSS referrals are appropriate or not, especially for students belonging to diverse backgrounds. However, despite the growing attention towards and need for cultural competence, minimal research has been conducted in further understanding the impacts of teachers' cultural competence on their MTSS referrals. The following hypotheses were proposed:

1. Teachers who have a greater amount of cultural competence training will make fewer MTSS referrals for racial/ethnic minority students than teachers with less cultural competence training. Cultural competence training can provide teachers with skills to best support academic and behavioral functioning for students of color in the school setting. Teachers who have been exposed to more training may have a greater understanding of these students' needs and may be able to better support their needs before considering an MTSS referral.
2. Teachers who are more culturally competent will make fewer MTSS referrals for racial/ethnic minority students, than teachers who are less culturally competent. Cultural competence is effective in understanding how behaviors may differ across various cultures. Teachers who possess these skills may be better prepared to examine student needs through a cultural lens and implement appropriate strategies prior to making an MTSS referral.

3. Teachers who are more culturally competent will make MTSS referrals later in the school year for racial/ethnic minority students. Culturally competent teachers may have developed culturally responsive strategies in the classroom to support their students. These teachers may be better equipped with strategies to curb academic and/or behavioral issues before making MTSS referrals.

## **Chapter II: Literature Review**

The literature presented below will provide an overview of the history of special education, especially as it relates to legislation to support children with disabilities and their families. RtI and PBIS systems are discussed, as well as the larger framework of MTSS. The concept of overrepresentation within special education is reviewed, with emphasis being placed within specific special education categories. The literature on cultural competence, teacher competence, and cultural competence training provided in teacher preparation programs is reviewed as well, addressing factors that may impact intervention referrals and the relationship between students and teachers in the educational setting.

### **History of Special Education**

The history of special education is often discussed in reference to the landmark passing of the Education for All Handicapped Children Act (EAHCA) of 1975. However, its origins extend long before the twentieth century (Spaulding & Pratt, 2015). In the 1700s, people with disabilities were essentially invisible, often shunned from society and hidden from public view by their families (Bicehouse & Faieta, 2017). Nonetheless, the early 1800s were marked by improvement in societal attitudes, changes in legislation, and the founding of institutions for training and teaching, which resulted in the growth of special education. Notably, there were positive shifts in the ideology at the time, such as the notion that individuals with disabilities deserved the same essential human rights as everyone else. Additionally, there was widespread support for access to nurturing environments (e.g., small population sizes in institutions to maintain close connections to one another). Conversely, another shift soon occurred that returned to models of care as

almshouses or prisons, causing a hinderance in progress for the field of special education (Spaulding & Pratt, 2015).

By 1860, Charles Darwin's survival of the fittest theory had been incorrectly applied to humans, resulting in eugenics being used as a basis for segregation and ill treatment in schools (e.g., reduced funding for individuals with disabilities) (Spaulding & Pratt, 2015). It was surmised that disabilities were inherited and had a biological origin. Institutionalization was used to segregate people with disabilities from society, and widespread perception shifted to view people with disabilities as threatening. Moreover, segregation in schools was supported; teachers believed that these children should be educated in a separate setting from typically-developing children (Bicehouse & Faieta, 2017).

The twentieth century was marked by radical and historical improvements for civil rights for various marginalized groups, including individuals with disabilities. Momentous court cases bolstered the fight for equality, such as 1954's *Brown v. the Board of Education*, which is regularly identified as monumental for race and equality in the United States. This case determined that separate education of races was unconstitutional; legal segregation came to an end in public schools. Thereafter, education needed to be inclusive of all students and equal under the law. The success of this case resulted in parent advocacy groups seeking legislative changes which would ultimately mandate a free education for all children, including those with disabilities (Spaulding & Pratt, 2015). Another milestone case, *PARC v. Commonwealth of Pennsylvania* (1972), prohibited the state from excluding children with disabilities from public schools. Furthermore, these children were provided an individualized education

that was unique to their needs. This case provided a framework for other states' laws that required all students be educated. This eventually led to the Education of All Handicapped Children Act (EAHCA) of 1975, a federal law which secured a free and appropriate education for all students with disabilities. This is currently known as the Individuals with Disabilities Education Act (IDEA) (Spaulding & Pratt, 2015).

### **Special Education Law**

Legislation in special education has been essential in securing rights for children with disabilities. Furthermore, these laws have assisted educational programs (e.g., public schools, preschool programs) in appropriately planning for these children in school by targeting their learning needs.

### ***IDEA***

IDEA 2004 is a special education law that mandates a free and appropriate education for students identified as having a disability. Under IDEA, students with disabilities are entitled to an education and related services in the least restrictive environment (LRE) necessary to be successful in school (U.S. Department of Education, n.d.). They are provided with the supports needed to engage in the same activities as peers who are nondisabled whenever possible. Ultimately, these students are given services designed to meet their special needs in order to prepare them beyond the school setting: for employment opportunities and independent living. The IDEA legislation includes Part B, which services individuals aged 3 through 21, and Part C, which allows infants and toddlers (ages birth to two), and their families to receive early intervention services.

Under IDEA Part B, children with disabilities are served under 13 categories of disabilities that may impact functioning and academic success in the school setting. School-aged children through the age of five are able to access services under the classification of developmental delay before it has to change to one of the aforementioned categories. Additionally, the students are provided with an Individualized Education Program (IEP), which outlines specific, individualized educational services tailored to each student's needs.

IDEA 2004 supported proactive efforts in assisting children with disabilities in school settings. Child-find, as described in the law, required school districts to identify and evaluate children who may be in need of special education services (RTI Action Network, n.d.). Similarly, lawmakers and educational leaders began to recognize the need to abolish the wait-to-fail model, where supports were provided after noticeable academic failure. The framework initially shifted to a multi-tiered, evidence-based approach known as Response to Intervention, commonly referred to as RtI. RtI emerged among discussions regarding the prevalence of students who were identified as having a Specific Learning Disability. According to the RTI Action Network (n.d.), lawmakers and educational leaders recognized that some students may not have required special education services had they been provided with the appropriate academic interventions that targeted individual areas of need early in their academic careers. By the time of the 2004 reauthorization of IDEA, RtI was created as a proactive system with carefully designed interventions, data-based decision-making, and progress monitoring to best address each student's need on a case-by-case basis. In the context of IDEA 2004 and the child-find mandate, RtI required schools to use research-based interventions and data

collection to ensure that students were exhausting all supports available in the general education curriculum before being referred to special education services.

### ***PBIS***

Similar to RTI, positive behavioral intervention and supports, frequently referred to as PBIS, emerged in IDEA as another approach to support student needs. It is a framework utilized to create positive change and improve outcomes for students with disabilities and significant behavioral problems (Simonsen & Sugai, 2019).

PBIS is generally depicted as a tiered systemic framework that uses data-based decision-making to target and improve student behavior. Tier 1 includes universal procedures intended for use with all students--for example, teaching expected social skills in all classrooms. Expectations for appropriate school-wide behaviors are taught to all students. Tier 2 targets students who may be at-risk and require additional support for behavioral, and ultimately, academic success. These students may be placed in an intervention group to target specific social-emotional skills for further development. Finally, Tier 3 is for students who require intensive, individualized support and have not responded to either Tier 1 or 2. For example, school teams may access behavioral specialists for support and complete behavioral assessments (e.g., Functional Behavioral Analysis) in order to address student needs and improve behavioral functioning (OSEP Technical Assistance Center, n.d.; Simonsen & Sugai, 2019). Both RtI and PBIS are designed and implemented as tiered intervention systems to ultimately address student skill deficits in both academic and behavioral contexts, respectively.

***RtI, PBIS, and MTSS: Supporting Students Through System-Wide Models***

RtI and PBIS, in essence, are components of a larger framework designed to support students in academic settings. Multitiered system of support, frequently referred to as MTSS, is a newer framework in which students are provided with core curriculum instruction; students are screened for at-risk academic, behavioral, and social-emotional concerns; research-based interventions are designed and implemented to target areas of need; and progress monitoring and data collection occur to implement programs with fidelity (Barrett & Newman, 2018). While the use of RtI may frequently be associated with students at academic risk or failure, and PBIS for students with social/emotional/behavioral challenges, MTSS encompasses both academic and behavioral needs. In other words, MTSS eliminates the need for multiple systems.

Eagle and colleagues (2015) summarized research regarding the rationale for utilizing MTSS. Both RtI and PBIS share qualities that support student needs (e.g., data-based decision-making, research-based interventions). However, they each usually address only one facet of student success—either academic achievement or behavioral wellbeing—despite common knowledge that these issues usually overlap in school settings. Furthermore, Eagle and colleagues shared that a growing amount of research upheld that integrating services resulted in greater academic and behavioral success.

The use of data-based decision-making and empirical strategies to promote student success, such as those used in MTSS, is supported through IDEA. Although IDEA continues to function as a critical component of special education law, another piece of legislation, 2001's No Child Left Behind, encouraged accountability for teachers, on behalf of the students they served and their academic progress in schools.

***No Child Left Behind***

The No Child Left Behind Act of 2001 (NCLB) was another special education law that aided in the educational success of students with disabilities. Generally speaking, NCLB required increased standards for practices used in schools. For instance, teachers were expected to utilize evidence-based practices, especially in an RtI framework, for targeting student needs and tracking progress in specific areas. While NCLB was influential in school accountability practices such as data-based decision-making and measuring student academic success, another law was created in its wake to continue to support student needs--2015's Every Student Succeeds Act, also known as ESSA.

***Every Student Succeeds Act***

Many comparisons can be made between ESSA and its predecessor. Brenner (2016) summarized that ESSA, for instance, maintains the testing and progress reporting requirements proposed by NCLB. However, states have been given more control in the way their schools are monitored. According to a White House report, ESSA rejects NCLB's *one size fits all* approach. ESSA holds students to higher academic standards to best prepare them for college and future careers, guarantees accountability by providing resources for students who fall behind academically, gives greater flexibility to states (e.g., allowing states to develop their own systems to target school improvement), provides greater access to high-quality preschool programs, and provides new resources to ultimately influence positive outcomes for students (The White House, Office of the Press Secretary, 2015). While there are significant differences between the two pieces of legislature, they both aim to improve student outcomes, especially for vulnerable populations in the academic setting (e.g., students falling behind academically, students

receiving special education supports). Overall, both federal laws protected and promoted academic achievement for all students; however, specific issues affect students of color in the educational setting.

### ***Overrepresentation of Students of Color and Special Education Categories***

Research supports that disproportionality impacts groups of students (e.g., racial groups) as well as students within special education categories. For instance, Blanchett (2006) reported that African American students are referred in larger numbers to specific special education classifications than their nonminority peers, particularly being identified as intellectually disabled (ID), emotionally disturbed (ED), and learning disabled (LD). However, Blanchett (2006) suggested that disproportionality occurs more often in high-incidence categories—such as ED or LD—due to the subjective nature of the referral process in schools and eligibility criteria. Low-occurring educational classifications, such as multiple disabilities or hearing impairment, for example, require medical documentation/diagnoses, while the criteria for a learning disability is much more flexible. These concerns have been addressed through professional organizations and governing bodies for teachers. These organizations have also directed attention toward cultural competence, especially teacher training and its significance throughout teachers' professional careers.

## **Cultural Competence**

### ***Teacher Training Programs and Cultural Competence***

Beginning in 2016, the Council for the Accreditation of Educator Preparation (CAEP) has been the sole accrediting body for teacher preparation programs. CAEP uses five professional standards to develop quality educators; knowledge of and training in

cultural competence is reflected in at least two of these standards. Standard 1 addresses content and pedagogical knowledge. CAEP upholds that educators develop an understanding of their field, learn the core principles of teaching, and apply their foundational knowledge to their work with students to facilitate learning and achievement beyond the school setting (e.g., college and career readiness) (CAEP, n.d., Standard 1). This includes measuring student progress and using data to appropriately address student needs; acknowledging the various learning styles that students may present based on differences in language, culture, and development; and acknowledging that students present with unique learning styles which may also differ based on diversity backgrounds. Similarly, Standard 3 requires that the educational institution select diverse teacher candidates. Additionally, the teacher program should demonstrate knowledge of and make improvement toward addressing the needs of hard-to-staff schools and shortage fields (e.g., ELL students, students with disabilities) (CAEP, n.d., Standard 3). Moreover, CAEP mandates that programs provide appropriate and adequate courses, field experiences, and trainings to prepare teacher candidates to become high-quality professionals. This includes recruiting teacher candidates of color and culturally competent teachers who will ultimately be working in education with rapidly changing student demographics and characteristics (e.g., increasing diversity in student population).

Teacher preparation programs across the U.S. uphold CAEP requirements through state legislation. In Connecticut, for example, teachers entering a preparation program on or after July 1, 2012 must complete training addressing cultural competency. This includes coursework and training experiences “concerning the awareness of students’

background and experience that lead to the development of skills, knowledge and behaviors that enable educators and students to build positive relationships and work effectively in cross-cultural situations” (Connecticut State Department of Education, 2017, Cultural Competency section, para. 1). In other words, teacher candidates must develop knowledge and awareness of their diverse student populations, cultural factors impacting these students, and must possess the appropriate tools to engage and instruct children belonging to diverse backgrounds. Since the CAEP standards are relatively new, more research is needed to determine whether there have been improvements in teachers’ knowledge and training in this area.

In order to uphold CAEP requirements, teacher preparation programs provide opportunities for their candidates to develop and enhance skills related to cultural diversity and competence. Cultural opportunities can include coursework, field experiences, cultural immersion experiences, and self-reflection and awareness exercises (Sandell & Tupy, 2015). Although CAEP mandates cultural diversity training, there is not a consistent program or curriculum used to prepare educators (Sandell & Tupy, 2015). Instead, educator preparation programs have the flexibility to choose how to implement courses focused on diversity awareness and competence.

Yet, teaching others how to become culturally competent has proven to be difficult to execute in practice (Smith & Glenn, 2019), at times, due to a disconnect between theory and practice (Alismail, 2016; Barnes, 2006; Landa & Stephens, 2017). For instance, Gay and Kirkland (2003) described challenges that may arise when developing critical consciousness and self-reflection—two skills they found essential to becoming an effective teacher. The researchers agreed that the development of these

abilities should be occurring as both preservice and in-service educators. Nonetheless, barriers to skill development included a lack of opportunities for guided instruction and feedback; preservice teachers' tendencies to shy away from engaging in meaningful discourse about related topics (e.g., analyzing own biases); and the belief that education is homogenous across all student populations, regardless of cultural background.

Consequently, numerous strategies have been proposed to provide meaningful and concrete training opportunities in educator preparation programs. In 2003, Milner and colleagues posited that, similar to a decade earlier (circa 1990), most educator preparation programs offered one or two courses in multicultural education. Due to increased attention on cultural competence within the past 10 to 15 years, it is likely that programs currently have more than one teaching modality related to diversity. While current teacher preparation programs have diversity courses and field placements to support students' cultural competence (Smith & Glenn, 2019), literature suggests that the various teaching methodologies can be grouped into three categories: multicultural education courses, multicultural immersion experiences, and self-awareness and reflections (Sandell & Tupy, 2015). Professionals advocate for preservice programs to provide a learning environment where reflection and consciousness is fostered and encouraged (Gay & Kirkland, 2003; Landa & Stephens, 2017; Milner et al., 2003; Taylor, 2010), where professors model expectations for their students (Gay & Kirkland, 2003), and where students are provided opportunities to practice skills, such as in case scenarios or role play (Gay & Kirkland, 2003) and through field placements (Milner et al., 2003; Taylor, 2010). While preservice teachers develop cultural competence through reflection, text,

and field experiences, in-service teachers are potentially provided with additional unique opportunities.

### ***Developing Cultural Competence in the Field***

Hulan (2015) stated that in order for teachers to become experts in creating culturally responsive classrooms, they must be able to further develop such skills through professional development, where related topics are discussed. In fact, in-service teachers are likely to continue to develop cultural competence in the field by attending in-house professional development, or through workshops or seminars outside of their districts. One limitation is that participants in these workshops often are expected to simply receive the information, as opposed to engaging and being an active participant in the learning experience (Hulan, 2015). Therefore, taking a multidimensional approach to cultural competency has been encouraged (Hanover Research, 2015; Hulan, 2015).

Furthermore, literature suggests that cultural competence extends beyond the individual level and into the communities in which teachers serve (Hanover Research, 2015). In May 2015, Connecticut published professional learning standards for cultural competence that described educators' development of cultural competence as a continuous process of "evaluating, examining, challenging, and adapting educational practices" (Connecticut State Department of Education, 2015, Components of Cultural Competence and Cultural Responsiveness in Education section, para. 1). Teachers can support equity in their school communities by pursuing opportunities to integrate students' home experiences (e.g., home language, family/community resources) with their school experiences to enhance student engagement (Connecticut State Department

of Education, 2015). Cultural competence can serve as another way for teachers to positively influence students' learning experiences in school.

### ***Teachers' Cultural Competence and Student Outcomes***

Researchers have found that teachers who are culturally competent engage with and instruct their students in a way that results in positive academic outcomes. In other words, teachers who develop an awareness and knowledge of cultural differences can positively impact students' academic experiences (Keengwe, 2010). Conversely, this research supports that when teachers disregard students' cultural backgrounds and experiences, this may contribute to issues that result in academic failure.

While there is a larger literature base on positive academic outcomes for students when teachers demonstrate cultural competence (Bustamante et al., 2016; Chiu et al., 2017; Keengwe, 2010), not as much research is available for positive behavioral outcomes. Rather than focusing directly on cultural competence, some research has addressed the teacher-student relationship. Notably, positive teacher relationships have generally been associated with improved social-emotional functioning in elementary-aged children (Rucinski et al., 2018), fewer high school dropout rates (Barile et al., 2012; Lee & Burkam, 2003), and higher academic achievement (Hamre & Pianta, 2001; Pianta & Stuhlman, 2004; Sabol & Pianta, 2012).

### ***Student-Teacher Dyad and Cultural Differences***

As previously stated, literature supports that disproportionality continues to impact school systems around the United States, as evidenced mostly in overrepresentation of ethnic minority students in special education (e.g., Annama et al., 2014). Limited research suggests under-identification of ethnic minority children (e.g.,

Morgan et al., 2015); additionally, it is more widely documented that underrepresentation occurs in gifted education programs. Research has proposed various reasons regarding the issue of overrepresentation. Kearns et al. (2005, p. 298) summarized several theories behind the dilemma, specifically involving African American students, including the “lack of cultural exposure theory,” racism and the notion of genetic inferiority of African Americans, and a bias in referrals for African American students.

According to Kearns et al. (2005), disadvantaged students of color are overrepresented in special education partly due to their being unable to access mainstream culture. Children living in poverty, for instance, may be limited in their opportunities to access enriching experiences. These types of events are considered cognitively stimulating, which can further promote skills necessary for both cognitive development and academic achievement (e.g., background knowledge, vocabulary and language skill development, and learning appropriate in-school behavior). Consequently, children with limited exposure to mainstream culture may be at risk for exhibiting learning problems in school.

Racism and the notion of genetic inferiority refers to the idea that some teachers may uphold a racist view of their African American students--that they have diminished intellectual abilities, rendering them unable to learn or inherently slow learners that require specialized instruction. Some teachers may overtly undermine their ethnic minority students' abilities, or do this subconsciously, by holding them to lowered academic expectations. Finally, Kearns et al. (2005) reported that a bias in referrals for African American students may be the result of two issues that may lead to overrepresentation: a bias in testing African American children (e.g., validity of

psychometric instruments with this population) and errors in decision-making resulting in special education placement.

Kearns et al. (2005) also discussed the disparity between the learning style of African Americans and their classroom cultures, and that some educators may be unaware of these students' learning styles. This may be related to cultural mismatch, another theory behind disproportionality that refers to the difference in cultures between teachers and students.

In contrast, Dee (2004) suggested that shared racial identity in a student-teacher dyad could impact student learning in various ways—for instance, if the student identifies with the teacher or views the teacher as a role model due to shared racial background. Dee examined whether pairing students with same-race teachers influenced achievement (specifically, test scores were calculated for reading and math). The results indicated that Black students performed better with Black teachers, while White students performed better with White teachers. While the findings supported positive academic outcomes for students who had a teacher of the same race, the study did not explain much about why racial match seemed to matter.

### **Cultural Competence and Teacher Preparation Training**

Possession of cultural competence is said to be influential in differentiating between behavior that is maladaptive or culturally appropriate (e.g., Smith & Tyler, 2010; Sue & Sue, 2013). One study has suggested that preservice teachers who have cultural competence training did not significantly differ in their special education referrals for African American versus European American students; however, they tended to refer Black students at a higher rate than White students for behavioral concerns (Reyes,

2009). Although this study examined the relationship between preservice teachers and their decision to refer students to special education, further empirical data is needed involving teachers' cultural competence and MTSS referrals.

Based upon the literature discussed above, the understanding of academics and behavior from a cultural perspective appears to be essential in the decision-making process for special education services. Research continues to support the importance of preservice courses in multiculturalism to develop cultural competence (Alismail, 2016). Professionals urge that continuous opportunities for cultural competence be available to teachers as student demographics continue to diversify, especially because these teachers face the possibility of encountering cross-cultural dissonance, a difference between home and school cultures, with their students (Chiu et al., 2017). In response to the increasingly diverse school population in the United States and a need for greater understanding of diverse backgrounds, the number of teacher training programs that include cultural competence training has risen over the past several decades (Banks, 2001; Reyes, 2009). Despite the increased attention towards cultural knowledge, preservice teachers often start their careers without the skills necessary to be sensitive towards cultural differences (Lambeth & Smith, 2016; Milner et al., 2003).

### **Measuring Cultural Competence**

Cultural competence is widely regarded as a fundamental skillset for teachers engaging with and instructing students belonging to racial/ethnic minority backgrounds. However, a persistent area of difficulty has been in finding an appropriate measure to evaluate competence. Although teachers' cultural competence proves to be beneficial for students' academic outcomes and environments, the skill set has been difficult to assess

(Bustamante et al., 2016; Tormala et al., 2018). Nonetheless, studies have employed the use of various types of measurement for cultural competence, including self-report scales, self-reflection, and type of cultural competence training.

### ***Self-Report Scales***

Self-reporting through rating scales is one of the most common methods used to evaluate competence; however, this method may be vulnerable to social desirability bias, which refers to “a participant’s need or desire for social approval and acceptance and the belief that this can be attained by means of culturally acceptable and appropriate behaviors” (Larson & Bradshaw, 2017, p. 101). Self-rating measures may be especially susceptible to social desirability due to societal norms in the U.S., which condemn stereotyping and negative views of individuals belonging to specific groups (Larson & Bradshaw, 2017). Nonetheless, as with other measures, self-report scales are validated when initially developed, allowing for confident use as reliable and valid sources of data. They continue to serve as a popular choice utilized as an efficient and simple method to obtain data directly from a participant.

For example, Reyes (2009) examined the role of cultural competence on special education referrals and measured cultural competence using a self-report measure called the Multicultural Awareness-Knowledge-Skills Scale, Teacher Edition (MAKSS-T). The MAKSS-T is a 20-item scale that measures facets of teachers’ cultural competence, including multicultural awareness, knowledge, and skills. Additionally, Lopes-Murphy and Murphy (2016) explored the relationship between teachers’ cultural competence, geographic locations, and cross-cultural experiences. Data was also obtained using self-report, as the participants completed a survey devised by the author. The survey was

comprised of various statements assessing cultural competence, including those describing scenarios that teachers and college students may experience in academic settings. The responses on the Likert-scale items were used to create a cultural competence score. In another study, Mahatmya and colleagues (2016) measured a tenet commonly associated with cultural competence—cultural awareness. Teachers' cultural awareness was measured through the use of a modified version of the Teacher Multicultural Attitude Survey (TMAS), which is also a self-report measure. On this version of the TMAS, respondents completed fourteen items regarding cultural awareness and attitudes toward teaching in a culturally-diverse classroom. Teachers responded to Likert-scale items, which were used to create a cultural competence composite score, with higher scores indicating greater cultural awareness.

Multicultural competence has also been explored in post-secondary settings. Mena and Rogers (2017) asked that participating faculty provide demographic information, as well as answer questions regarding professional background, multicultural education, and multicultural training experiences. Participants completed various surveys—among them, the Multicultural Teaching Competency Inventory (MTCI; Prieto, 2012), an 11-item scale designed for use in higher education. The MTCI includes two subscales: Acquired Culture-Based Knowledge (MTCI-Knowledge) and Student-Oriented Cultural Sensitivity (MTCI-Sensitivity). Response options ranged from 1 (*not at all*) to 5 (*to a very large extent*). Scores were devised by averaging the responses to the subscale items.

Another self-report measure, the Multicultural Teaching Competency Scale (MTCS; Spanierman et al., 2011) was selected for the current study due to its practicality

in school settings, decreased susceptibility to social desirability compared to other cultural competency self-report measures, and reliability and validity for racism awareness and multicultural teaching attitudes. It is described in further detail in the methodology chapter.

### ***Self-Reflection***

In order to facilitate teachers' development of cultural competence, Taylor (2010) suggested the use of self-reflection and an examination of individuals' characteristics and experiences. For example, Sandell and Tupy (2015) examined the difference between preservice teachers' intercultural competence before and after completing a course that targeted cross-cultural experiences. Additionally, the researchers utilized various instructional and learning methods, such as class meetings, which included workshops and presentations, self-assessments, textbook readings, and partnership with a member from another cultural group. The preservice teachers were assigned self-reflection papers throughout the semester, including topics related to cultural diversity and self-assessment. Landa and Stephens (2017) conducted a case study that examined a preservice teacher's cultural competence through the use of children's literature. The individual's reflection pieces to the articles of literature were coded based on themes/emotions related to cultural factors (e.g., marginalization of groups). In both instances, teachers' cultural competence was influenced through exposure to cultural content or experiences and examined via self-reflection.

### ***Type of Cultural Competence Training***

Teachers' training can serve as another option for evaluating cultural competence. The type of training varies depending on professional status. For example, while in their

preparation programs, teachers are likely to be exposed to coursework, field experiences, conferences, and/or professional presentations. Later, as a certified teacher, training can include professional development, webinars, conferences, and/or workshops. Rogers-Sirin and Sirin (2009) gathered data on a training workshop called the REST-KIT and measured participants' levels of cultural competence by completing pre-and posttests. The pre- and posttest consisted of the TMAS, a demographic questionnaire, and two different versions of the Quick Racial and Ethical Sensitivity Test (Quick-REST). The Quick-REST utilizes video depictions of various scenarios involving discrimination. It is designed to measure participants' ability to recognize ethical violations in the videos. The results of the study indicate that there was a significant difference between the pre- and posttest scores on both the TMAS and the QUICK-Rest-with posttest scores being higher. Overall, the study, which was designed to gather preliminary data on the REST-KIT, indicated that preservice teachers' cultural competence was improved.

Teacher preparation programs are currently required to provide cultural competence training; this frequently occurs through coursework but may also be provided through other activities such as field experiences (Sandell & Tupy, 2015). Therefore, it is likely that current teachers—especially newer teachers—have had some sort of exposure to cultural competence training while preservice. Teachers' cultural competence can positively impact students' academic achievement and learning environments (Bustamante et al., 2016; Gay, 2002). If teachers perceive themselves as being competent, they may not only feel confident in their skills, but also be prepared to enter a classroom to engage with and support students from diverse backgrounds.

Although cultural competence has been gaining attention in its usefulness in educational settings, substantial research still needs to be conducted regarding the relationship between teachers' cultural competence training and their MTSS referrals. During the span of their careers, teachers will undoubtedly work with students of varying cultural backgrounds. Theoretically, teachers who have had greater amounts of cultural competence training, as indicated by graduate coursework, training experiences, and/or professional experiences, may be better prepared to work with ethnic minority students. More importantly, these teachers may have the skills and knowledge to better understand cultural differences which may impact a student's academic and behavioral functioning. Conversely, teachers with irregular training may not have the skills that can best support these students' academic and behavioral success in school.

### **Summary**

Cultural issues, such as disproportionality of certain ethnic minority groups and cultural mismatch between students and teachers, can negatively affect ethnic minority students in educational settings (Kearns et al., 2005; Keengwe, 2010; Mahatmya et al., 2016). Research has supported that teachers developing skills in cultural competence and cultural awareness can serve as valuable tools in supporting and working with children of color (Bustamante et al., 2016; Lambeth & Smith, 2016). Federal and state guidelines require schools to implement preventative, research-based interventions (e.g., MTSS) to support children who demonstrate academic and behavioral needs. Moreover, federal mandates also indicate that schools should make efforts in using culturally-responsive practices when providing academic and social/emotional support to at-risk students. In other words, schools should be diligent in providing ethically sound practices with

vulnerable populations, including ethnic minority students, as to not contribute to disproportionality in educational settings. Yet, issues related to cultural competence, referrals to MTSS, and disproportionality continue to exist within educational settings. The current study aimed to explore the relationship between teachers' cultural competence, in terms of their perceptions about their competence and their training, and MTSS referrals for academic and behavioral concerns.

### **Chapter III: Methodology**

This study was conducted in order to examine teachers' cultural competence in relation to their MTSS referrals for students belonging to racial and ethnic groups. Participants completed a questionnaire that included questions on cultural competence training experiences, as well as a self-report scale (MTCS) that measured cultural competence. Teachers' MTSS referrals over the past three school years were reviewed. The results were analyzed using multiple regression to determine whether teachers' cultural competence training or self-perceived cultural competence significantly impacted the number of MTSS referrals or the timing of the MTSS referrals.

#### **Participants**

The participants included 29 elementary school teachers of grades kindergarten through five. Participants were from two schools in a large school district in an urban area in Connecticut that serves a diverse population of students. The schools used in the study serve students in pre-kindergarten through fifth grade. Research has demonstrated that timely intervention services when students are early in their academic careers are essential to later academic success (Colenbrander et al., 2018). In other words, early intervention with children can be beneficial. Therefore, elementary school teachers were ideal for the participant pool for this study because they may be highly influential in identifying and supporting students at-risk for academic failure and/or in need of behavioral services.

One school (to be called School A) currently contains 282 elementary students and 34 teachers. During the 2019-2020 school year, 84% of students at this school received free/reduced lunch. Regarding the racial/ethnic makeup of the student

population, 70.5% of the students were Black, 24.1% were Hispanic/Latino, and 2.7% were identified as being of two or more races.

The second school (to be called School B) currently contains 299 elementary students and 37 teachers. During the 2019-2020 school year, 97% of students received free/reduced lunch. In terms of race and ethnicity, 56.9% of students were Hispanic/Latino, 38.9% were Black, and 1.8% were identified as White.

The number of teachers at each school slightly fluctuates from year to year. However, based on the data from the 2019-2020 school year, there were a total of 71 teachers across the two schools. There were 29 participants in the current study, so 41% of the teachers participated.

The participants were certified teachers. Teachers were asked whether they hold a current teaching certification, as some states allow candidates to teach if they belong to a designated shortage area (e.g., special education teachers); in Connecticut, this is known as DSAP (Durational Shortage Area Permit). However, if a teacher (e.g., DSAP or substitute teacher) did not hold a current certification but had been in a teaching position and involved in the school's prereferral process, he/she was still included as a part of data collection. The prereferral process is described in more detail within the *MTSS Referrals* section below.

There were 18 teachers from School A and 11 teachers from School B. In School A, most participants were female, and either White/Caucasian or Black/African American. Two of the teachers taught kindergarten, two taught second grade, three taught third grade, one taught fourth grade, three taught fifth grade, and seven taught multiple grade levels. The average length of teaching experience was 21.44 years. Fifteen teachers

held a Professional Educator Certificate, while three teachers were at the Provisional Educator level.

In School B, most participants identified as White/Caucasian. Of the 11 teachers who participated in the study, all, except for one, were female. Similar to School A, the participants in School B taught across various grades, spanning from kindergarten to five, with four teachers who taught multiple grade levels. Average length of teaching experience was 17.18 years. Nine teachers were at the Professional Educator level, while two teachers were certified as Provisional Educators. Overall, the teachers' demographics across schools seemed similar; both groups of teachers were largely female, were highly educated, and on average, had many years of teaching experience.

There were a total of 29 participants, comprised mostly of White/Caucasian (55.2%) and Black/African American teachers (34.5%) (see Table 1 for the racial/ethnic makeup of the participants, including the numbers within each school). Similar to the demographics of the U.S. teacher population, most participants (86.2%) were female (see Table 2 for additional details on gender demographics). When asked to report their grade levels, three teachers taught kindergarten, two were first grade teachers, four taught second and third grade each, one taught fourth grade, and four taught fifth grade. Eleven teachers taught multiple grade levels.

Regarding teaching certification, 24 teachers were at the Professional Educator Certification level, while five teachers held their Provisional Educator Certification. The participants were highly educated, with most teachers (69%) having a masters' degree (see Table 3 for further information on the educational attainment of the participants). The majority of participants (65.5% of teachers) were certified in elementary education

(refer to Table 4 for additional details on participants' specialty areas). The teachers' responses indicated a variety of length of experience in their careers, with an overall mean of 19.8 years ( $SD = 9$ , range = 3-36).

### **Research Variables and Measures**

Participants completed a packet containing a demographic questionnaire and a multicultural competency scale. The questionnaire included demographic information about the participants, such as their teaching experience, teaching certification, and training information. The multicultural teaching competency scale provided information regarding cultural competency. Consequently, multicultural competence was assessed in two ways: training and self-perceived competence. Additionally, information about MTSS referrals were obtained through school records.

#### ***Demographic Questionnaire (see Appendix A)***

Demographic data of the participants included gender, race/ethnicity, current grade level taught, years of teaching experience, and type of teaching certification. This information was used to describe the participant pool.

#### ***Teachers' Cultural Competence Training (within the Demographic Questionnaire)***

In order to determine cultural competence training, participants were asked to provide the number of multiculturalism courses they had taken, indicate the types of training experiences while in a teacher preparation program, and the training experiences during their professional careers as a certified teacher. The number of types of experiences were then added in order to get an overall cultural competence training score.

A small pilot was conducted to obtain feedback on select questions on the questionnaire with the assistance of professionals who work in educational settings

alongside teachers. The training questions were slightly adjusted following feedback on the wording and response options. On Question #8, participants are asked to write in the number of multicultural courses they have taken. Wording was changed to highlight that the courses in question should focus primarily on multiculturalism in education. Several of the response options were changed in Questions #9 and #10 due to categories not being mutually exclusive. Specifically, “attended professional presentation” was not deemed significantly different than “attended professional conference.” Due to potential overlap, the former option was removed. Participants still had the option to identify any training experiences that were not listed under the option of “Other (please specify).” Additionally, participants had the option to write in any other unique experiences not listed in the question.

### ***Teachers' Self-Perceived Cultural Competence***

#### **Multicultural Teaching Competency Scale (MTCS; Spanierman et al., 2011).**

The Multicultural Teaching Competency Scale (MTCS) is comprised of 16 items that measure racism awareness and multicultural teaching attitudes. This survey was given to teachers to assess their cultural competence. The scale is devised of two subscales, which are described as two features of multicultural competencies: multicultural skills and multicultural knowledge. Participants respond to each statement using a 6-point Likert scale, ranging from 1 = Strongly Disagree to 6 = Strongly Agree. One item is reverse scored. Scores were summed. Higher scores indicate a higher level of multicultural competency in teaching. For the purposes of the current study, teachers' responses on the Likert scale items were averaged for a cultural competency score. In past research (Spanierman, et al., 2011), Cronbach's alpha was used to determine the reliability of the

measure. The alpha for the MTCS was .88. This was also calculated for the two subscales in the measure. Cronbach's alpha for MTCS Skill scale was .83 and .80 for MTCS Knowledge. In the current study, the whole scale score was used for analyses, as teachers' responses were evaluated across the entire measure, as opposed to questions related to either the Skill or Knowledge scale.

### ***MTSS Referrals***

The number of MTSS referrals for both academic and behavioral concerns were obtained through the prereferral paperwork that was already submitted by the teachers (see Appendix C for a blank referral form). The prereferral form is used to refer a student for academic, social/emotional, and/or behavioral concerns that appear to be impacting the student's functioning and academic success in the school setting. The prereferral process is used to identify students at risk for academic, social, and/or emotional problems. The student may experience difficulty in the aforementioned areas that appear to be impacting functioning and academic progress in the school setting. The prereferral team reviews the referral for the student that the teacher or parent has submitted and devises a plan together to address the problems. The goal of the plan is to promote academic engagement and success. The team meets a second time to review the data and determine whether an initial referral for special education services is needed.

These students may require more specific programming, such as an academic or behavioral intervention, to promote success in the identified problem area. The prereferral team is composed of various school personnel who may work with or will work with the student (e.g., classroom teacher, speech/language pathologist). The team meets and creates a plan for the student. Data is collected for at least six weeks and is

reviewed at a follow-up prereferral team meeting. At that time, the team determines whether the student has made sufficient progress. The student may be referred as an initial referral to special education for further testing to determine whether the student has an educational disability.

The individual submitting the referral—usually, a teacher—is required to include current data on the student's academic functioning (e.g., reading level) across subject areas, any relevant health data, interventions attempted, and student strengths and weaknesses. When the form is submitted to the gatekeeper for referrals, a prereferral team meeting is scheduled, where the team discusses concerns and devises a plan with academic and/or behavioral interventions and supports in order to facilitate student progress.

Referrals from the 2018-2019, 2019-2020, and 2020-2021 school years were included in this study. Academic and behavioral referrals were analyzed separately. As referenced throughout this document, research findings have indicated both an underestimate of academic potential of ethnic minority students, and misinterpretation of behaviors exhibited by these students. Therefore, this study attempted to determine whether these findings are evident across the two types of referrals.

The prereferral forms include some demographic information, including the child's age, grade, teacher, parent, home language, and reason for referral. However, for the purposes of this study, the only information obtained from the referral was the name of the teacher who referred the child, the child's race/ethnicity, the date of the referral, and the type of the referral.

#### ***Time of Year of MTSS Referral***

Teachers' MTSS referrals were explored in relation to the time of year they were submitted. More specifically, the relationship between cultural competence training and time of year for MTSS referrals were analyzed. The time within the school year were coded with each month assigned sequential numbers, such that September = 1, October = 2, November = 3, etc. The date of the MTSS referral was obtained through the prereferral paperwork.

### ***Years of Experience***

Teachers' years of experience were included in the study as a control variable. This information was obtained from Question #4 on the Demographic Questionnaire and is a continuous variable.

### ***Race/Ethnicity of Teacher***

The race/ethnicity of teachers was included as a control variable. This information was obtained from the Demographic Questionnaire and is a categorical variable. Options for race/ethnic identity included White/Caucasian, Black/African American, Hispanic/Latino, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, or Other.

Additional information, such as students' race, were obtained through the district's database. Options for students' race on the database include American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian/Other Pacific Islander, and White. Parents/guardians have the option to select multiple racial categories if needed. The study included students belonging to racial/ethnic minority groups only.

### **Procedure**

Information about the study was initially shared via email from the researcher to the principals of the schools, who sent it out to the teachers through the school Listserv email group. The email included a video recording from the researcher, which detailed the study and requested volunteers. The video was created due to the cancellation of in-person staff meetings in response to the COVID-19 pandemic. Staff meetings were held virtually instead. In the video and email, the teachers were told that this researcher was looking for volunteers for a study that would help to better understand the relationship between teachers and students in a multicultural context essential to their roles in school. Teachers were informed that participation is voluntary, but highly encouraged due to the expected usefulness of the study in the district; improving the climate and culture in the district, especially in light of current social issues in the world; and continuing to advocate for student success while accounting for our students' diverse backgrounds and experiences. They were also told that teachers' data as a group can inform their roles in the educational setting as they work with groups of diverse students, although the responses of individual teachers would not be reported. The overall results of the study can also be used to further inform how the district educates and trains their staff to be better equipped to engage with ethnically diverse students.

Teachers were able to discontinue participation at any time without penalty. The demographic questionnaire was able to be completed in just a few minutes, allowing for quick completion during or after the workday. Teachers consented to participation and to have information about their special education referrals obtained from prereferral records. The referral information was obtained from the gatekeeper. The only information that this

writer obtained was the teacher who referred the child, the reason for referral, the race/ethnicity of the child, and the date of the referral.

Participants were told that the researcher alone had access to the data; thus, their responses were confidential, which was stressed to them. Other school staff and administration did not have access to teachers' responses or knew whether they participated.

In order to encourage participation in the study, participants were entered into a raffle drawing for a chance to win one of two \$50 Visa gift cards, available for use at a wide variety of participating locations.

## **Chapter IV: Results**

The relationship between teachers' cultural competence and their MTSS referrals for racially and ethnically diverse students was examined. Elementary teachers' referral data across three school years was reviewed while considering their cultural competence, as measured by the Multicultural Teaching Competency Scale (MTCS), and self-reported training experiences throughout their educational and professional careers. The relationship between cultural competence and the timing of MTSS referrals, as well as the number of MTSS referrals, were examined using multiple regression analyses. Academic and behavioral referrals were analyzed separately, as well as together.

### **MTSS Referrals**

There were a total of 29 MTSS referrals for academic and/or behavioral issues across the three school years. Referral data was obtained from a total of nine teachers, despite 29 teachers participating in the study. This may be the result of limited referral data being available--for example, due to the COVID-19 pandemic which interrupted the referral process. Additionally, it is also possible that some teachers who participated in the study did not submit any referrals over the three years, or their data was not accurately maintained. This will be discussed further in the Discussion chapter.

All referrals were for students who belonged to racial/ethnic categories; these students were either identified as African American and/or Hispanic/Latino. There were more referrals for students due solely to academic concerns ( $N = 19$ ) than behavioral referrals ( $N = 5$ ) and academic/behavioral referrals ( $N = 5$ ). The number of referrals submitted by teachers ranged from zero to eight. When considering academic referrals

that were submitted, most teachers (56%) had completed just one referral over the course of three years.

### **Average Monthly Timing of MTSS Referrals**

The timing of the MTSS referrals were calculated by assigning a number for each month, from 1 (September) to 10 (June). When more than one referral was submitted, the average of these months was taken across all of the referrals to create the timing variable. The date of referral was only available for 18 out of 29 of the referrals that were submitted.

The earliest referrals were submitted in October. This seems to make sense when considering the flow of the school year, where late August/early September marks the start of the year and data is beginning to be collected on student performances. See Table 5 for additional details on the number of referrals and the average monthly timing of the referrals from each of the nine teachers from whom data was obtained.

### **Participants' Multicultural Courses and Experiences**

There was missing data from several participants from two variables: multicultural courses and the MTCS measure. Missing data is a common issue in research, especially when data is gathered through self-report measures (Fox-Wasylyshyn & El-Masri, 2005). In order to appropriately handle the missing data in this study, single imputation models were utilized. Single imputation refers to the process where missing data is replaced with a single estimated value, based on other values within the data set (Fox-Wasylyshyn & El-Masri, 2005). Mean substitution, a single imputation technique, was selected as an appropriate method to handle missing data within the current study. While this method is empirically supported, it is noted that it reduces variability in the

data and can introduce bias in the summary statistics (i.e., mean, standard deviation) (Sinharay, Stern, & Russell, 2001; Zhang, 2016). Notably, after mean substitution was used to estimate the remaining eight participants' multicultural courses, the statistics for this variable were impacted, resulting in less variability. This is discussed further within the Discussion chapter.

Eight participants' responses resulted in missing data when asked to recall and report the number of multicultural courses they had taken as a student. Of these eight participants, five of them reported they could not remember how many courses they had taken. Two individuals' responses were unclear, with one stating "a couple" and another reporting having taken "lots." Finally, the last participant reported participating in a "bilingual bicultural program." In order to handle the missing data, the mean of the remaining 21 participants' number of multicultural courses taken ( $M = 1$ ) was used to replace the missing values for the eight respondents.

Teachers were asked to report the number of courses they had taken in school that were rooted in multiculturalism. On average, teachers had only one course focused on multiculturalism ( $M = 1.31$ ,  $SD = 1.75$ , range = 0 – 9) (see Table 6 for further detail regarding participants' multicultural courses). While some participants had taken just one class ( $N = 4$ ), many reported not taking any at all ( $N = 9$ ). Four teachers reported taking two courses. Three teachers had taken three courses each. One teacher notably reported having nine classes focused on multiculturalism. After mean substitution was used, eight teachers were counted as taking one class, bringing the total number to 12 teachers with one multicultural class.

Participants were also asked to report their experiences in multiculturalism while in teacher preparation programs and in their professional careers. Such experiences included completing a field placement, conducting research, professional development, or attending a conference. When reporting their experiences in multiculturalism, most participants indicated they have had only one experience in each of their preparation programs and professional careers as certified teachers. Most participants (58.6%) reported that during their years as a student, their multicultural experience was gained through “reading books or articles outside of coursework.” As a certified teacher, most individuals reported attending “in-district professional development” centered on multiculturalism (62.1%) (see Tables 7, 8, and 9 for additional information on multiculturalism experiences).

### ***Participants' Multicultural Competence Training***

The training score was calculated based on the number of multicultural courses the participants had taken, their training experiences as a student, and their training experiences as a professional. The values of the three variables were summed to create the overall training score. There were an equal number of participants ( $N = 6$ ) who had either three or four total training experiences. Similarly, there were equal numbers of participants ( $N = 3$ ) who reported either having no training experiences across settings or one training experience. One participant reported experiences resulted in a total training score of 15; this was the highest score for this variable among all participants. Overall, participants' multicultural training experiences resulted in an average training score of 4.1 ( $SD = 3.1$ , range = 0 – 15).

### **Participants' Cultural Competence**

Participants assessed their own cultural competence using the MTCS. The questions in the scale were designed to measure teachers' racism awareness and multicultural teaching attitudes. The measure uses a 6-point Likert scale, ranging from 1 = Strongly Disagree to 6 = Strongly Agree. Scores are summed in order to get a cultural competence score, with higher scores indicating a higher level of multicultural competency in teaching. For the purposes of the current study, teachers' responses on the Likert scale items were averaged to obtain a cultural competency score.

Four participants had missing data from the MTCS survey. Mean substitution was also utilized to handle these missing items, especially to remain consistent with the single imputation method used for missing multicultural courses taken. To replace the four participants' missing MTCS items, the mean response was calculated for each survey question, based on the remaining participants' responses.

The average of the participants' responses was 4.39 and the standard deviation was .70. Teachers' average responses ranged from 2.19 (with a score of 2 corresponding to *Moderately Disagree*) to 5.81 (with a score of 5 equating to *Moderately Agree*). Most participants' (51.3%) average cultural competence scores fell between 4.00 and 5.00. Overall, the average group performance indicates that teachers "slightly agreed" with the statements reflecting cultural competence.

A Pearson correlation coefficient was computed to assess the relationship between teachers' MTCS scores and their total cultural competence training experiences. The results suggested a significant, positive relationship between teachers' self-ratings of cultural competence and their training experiences [ $r(27) = .40, p = .033$ ]. This suggests

that as teachers reported a greater amount of multicultural competence training experiences, they tended to also rate themselves as more culturally competent.

### **Multiple Regression Analyses to Examine Hypotheses**

Multiple regression was utilized to test the three hypotheses included in this study. A dummy variable for race was created in order to collapse the teachers' race into a "racial and ethnic minority" category. White/Caucasian served as the constant variable in the regression equation and was coded as 1 in the dummy variable. Black/African American, Hispanic/Latino, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander represented the reference or comparison group and was coded as 0. For the three hypotheses, academic and behavioral referrals were analyzed separately, as well as together. Two hypotheses included three models for the three types of referrals, while the third hypothesis examined the types of referrals together only.

### ***Multiple Regression Models***

To ensure that the results of a multiple regression model are accurate, there are four assumptions that must be met: the dependent variable is a linear function of the independent variables, each observation is drawn independently, the variance of errors is not a function of the independent variables, and the errors are normally distributed (Keith, 2005).

When assessed, it was determined that the predictor variables in the regression did not have a linear relationship with the outcome variables. This assumption is the most important of all; if this assumption is violated, the results obtained in the multiple regression model may be biased (Keith, 2005). In other words, the values from the model

may not be true estimates and can impact the ability to accurately interpret the multiple regression results. Additionally, the residuals did not follow a normal distribution; thus, this assumption was violated as well. Lastly, multicollinearity was met, indicating that the independent variables did not correlate too strongly with one another.

***Hypothesis 1: Teachers who have more cultural competence training will make fewer MTSS referrals.***

It was hypothesized that teachers who have a greater amount of cultural competence training will make fewer MTSS referrals for racial/ethnic minority students than teachers with less cultural competence training. Multiple regression analyses were used to examine whether teachers' cultural competence training significantly predicted their academic referrals, behavior referrals, and overall referrals, while controlling for teachers' race and years of teaching experience. See Table 10 for all multiple regression results.

Academic MTSS referrals were regressed on teachers' cultural competence training, teachers' race, and years of experience. The multiple regression model explained 1.2% of the variance ( $R^2 = .012$ ). The results were not statistically significant ( $F[3, 25] = .104, p = .957$ ). Teachers' cultural competence training did not significantly predict academic referrals ( $p = .876$ ). Neither teachers' years of experience ( $p = .701$ ) nor teachers' race ( $p = .680$ ) were significantly related to academic referrals.

Behavioral referrals were regressed on teachers' cultural competence training, race, and years of experience. The variables (teachers' cultural competence training, race, and years of experience) accounted for 9.8% of the variance ( $R^2 = .098$ ). The results were not statistically significant ( $F[3, 25] = .901, p = .455$ ). There was not a significant

relationship between cultural competence training experiences and behavioral referrals ( $p = .120$ ). Teachers' years of experience ( $p = .833$ ) and teachers' race ( $p = .760$ ) were not significantly related to behavioral referrals.

When overall referrals were examined, the multiple regression model explained 1.4% of the variance ( $R^2 = .014$ ). This was not statistically significant ( $F[3, 25] = .115, p = .951$ ). Teachers' cultural competence training experiences ( $p = .652$ ) were not a significant factor in teachers' overall referrals. Additionally, the control variables of years of experience ( $p = .863$ ) and race ( $p = .829$ ) did not significantly predict the number of overall referrals. Therefore, this hypothesis was not supported by the results of the multiple regression analyses.

***Hypothesis 2: Teachers who are more culturally competent will make fewer MTSS referrals.***

It was hypothesized that teachers who are more culturally competent will make fewer MTSS referrals for racial/ethnic minority students than teachers who are less culturally competent. A multiple regression model examined whether teachers' cultural competence score, as measured by the MTCS, significantly predicted their academic referrals, behavior referrals, and overall referrals, while controlling for teachers' race and years of teaching experience.

Academic referrals were regressed on teachers' cultural competence score, race, and years of experience. The multiple regression model explained 2.9% of the variance ( $R^2 = .029$ ). The result was not statistically significant ( $F[3, 25] = .248, p = .862$ ). Similarly, teachers' cultural competence ( $p = .508$ ) was not significantly related to

academic referrals. Teachers' years of experience ( $p = .714$ ) and teachers' race ( $p = .643$ ) did not significantly predict academic referrals.

When behavioral referrals were regressed on teachers' cultural competence scores while controlling for teachers' race and years of experience, the model explained 4% of the variance ( $R^2 = .040$ ). The result was not statistically significant ( $F[3, 25] = .347, p = .792$ ). Teachers' cultural competence was not significantly related to behavioral referrals ( $p = .342$ ). Similarly, teachers' years of experience ( $p = .805$ ) and teachers' race ( $p = .995$ ) did not significantly predict the number of behavioral referrals.

Lastly, when overall referrals were examined, the multiple regression model accounted for .6% of the variance ( $R^2 = .006$ ). The results of the multiple regression were not statistically significant ( $F[3, 25] = .054, p = .983$ ). Similarly, the effects of teachers' cultural competence ( $p = .870$ ) were not significant factors in teachers' overall referrals. There was not a significant relationship between overall referrals and teachers' years of experience ( $p = .889$ ) or teachers' race ( $p = .719$ ). Therefore, this hypothesis was not supported by the results of the multiple regression analyses.

***Hypothesis 3: Teachers who are more culturally competent will make MTSS referrals later in the year.***

It was hypothesized that teachers who are more culturally competent will make MTSS referrals later in the school year for racial/ethnic minority students. Multiple regression was used to determine the influence of teachers' cultural competence, as measured by the MTCS, on the timing of their overall MTSS referrals. The average timing of each teachers' referrals was regressed on the teachers' cultural competence score, while controlling for teachers' race and years of teaching experience. The multiple

regression model explained 14.3% of the variance ( $R^2 = .143$ ). The result was not statistically significant ( $F[3, 25] = .279, p = .839$ ). Additionally, teachers' cultural competence ( $p = .806$ ) was not significantly related to the timing of MTSS referrals. Teachers' years of experience ( $p = .588$ ) and teachers' race ( $p = .517$ ) were not significant predictors on the timing of the MTSS referrals. Therefore, this hypothesis was not supported by the results of the multiple regression analyses.

## **Chapter V: Discussion**

The current study examined the relationship between teachers' cultural competence and their MTSS referrals for academic and behavioral concerns among ethnic minority students. Elementary teachers in kindergarten through fifth grade completed a questionnaire that required them to report their multicultural courses taken as a student, as well as their multicultural experiences as a student and as a teacher. These experiences were used to create a multicultural training score. Additionally, teachers completed a self-report scale, the MTCS, to rate their multicultural teaching competency. Information regarding teachers' MTSS referrals, specifically regarding the number of referrals, type of referral, and the timing of the referral, was also obtained. Literature and research about MTSS are continuing to expand, and little research exists at this time especially about MTSS referrals and their relation to cultural competence. Since the MTSS framework addresses academic and behavioral concerns, the current study explored both types of referrals. Ultimately, this study aimed to explore and gain insight into teachers' multiculturalism training experiences, their self-perceived cultural competence, and how these factors may relate to their MTSS referrals for children belonging to racially/ethnically diverse groups.

The first hypothesis was that teachers with greater cultural competence training would make fewer MTSS referrals. The second hypothesis was that teachers with greater cultural competence, as measured by the MTCS, would make fewer MTSS referrals. The third hypothesis was that teachers with greater cultural competence will make MTSS referrals later in the school year. All hypotheses were tested using multiple regression analyses to explore the relationship between teachers' cultural competence-measured via

their training experiences and self-ratings-and their MTSS referrals (academic, behavioral, and overall referral numbers). The results indicated that there was not a significant relationship between these variables. Thus, overall, the results of the study did not support the hypotheses.

There is limited research on the relationship between cultural competence and MTSS referrals. One study found that lower levels of cultural competence in preservice teachers led to greater likelihood of behavioral referrals (Reyes, 2009). However, research does support that the significance of teachers' cultural competence on student achievement and school experiences (Bustamante et al., 2016). Similarly, cultural competence has been found to be a significant factor in evaluating behavioral concerns (Vincent et al., 2012). While the results of the current study did not support the small existing literature base, they may have been impacted by a variety of factors--namely, the small sample size and issues with methodology--that ultimately led to results that were not statistically significant.

### **Barriers with Data and Methodology**

#### ***Sample Size***

One of the prevailing issues in this study was the small sample size. With only 29 teachers in the study, this sample was not adequate to get meaningful results for the multiple regression model. More specifically, a larger sample size will not only provide more reliable results, but it will also give the statistical model enough power to detect a difference if there is one. It is generally accepted that 10 to 20 participants are needed for each independent variable, when considering statistical analyses measures (Keith, 2005). Each of the multiple regression models in the current study included three independent

variables: either training experiences or cultural competence (MTCS score), in addition to teachers' race and years of experience.

Power is understood as the test's ability to detect a difference when there is one. In other words, ideally, we would like our tests to have enough power to reject a false null hypothesis--or, to determine that there is a statistical and significant relationship between the variables (e.g., teachers' cultural competence training and their MTSS referrals).

Power calculation was completed post-hoc to determine whether the sample was large enough for the multiple aggression analyses. Results indicated a minimum sample size of 76 participants was needed in order to get statistically significant results ( $p = .05$ ) and achieve power of .8 with a medium effect size. Thus, due to the small sample size ( $N = 29$ ), the multiple regression model did not have enough power.

### ***Measuring Cultural Competence***

Another issue was in measuring cultural competence. This ultimately resulted in missing data, notably in the number of cultural competence courses taken. When individuals are asked to self-report, especially relying on memory, it can become challenging to accurately recall information, especially as longevity in the field increases. For instance, some individuals reported being in graduate school over 20 years ago. Certainly, this can impact the teacher's ability to remember their coursework and experiences with accuracy. Another possibility is that these courses were not yet created during the time in which veteran teachers were in their teacher programs. As a result, some of the missing course numbers may be indicative of a lack of experience, as opposed to faulty memory.

Of the eight teachers with missing course experiences, five of them reported not being able to recall the number of courses they had taken. The other three respondents indicated they had taken multicultural courses but did not put a specific number; this could have been due to difficulty in recall as well.

### **Barriers in Study Implementation and Participant Recruitment**

There were challenges in implementing the study, both before and during the data collection process. Initially, there were barriers in recruiting teachers due to an extended delay in receiving approval from the district. Ultimately, this resulted in recruiting teachers during the last three weeks of June, which is during the last few weeks of school. This may have impacted teachers' willingness to participate due to end-of-the-year demands and tasks that they are required to complete. It is possible that more teachers would have been willing to participate in the study had there been more time, although the certainty of this is unknown.

Another challenge was in the method of recruiting teachers. Originally, teachers were to be recruited in-person at a staff meeting, especially in hopes of increasing likelihood of participation by seeing the researcher face-to-face. Due to the COVID-19 pandemic, in-person staff meetings had been cancelled and were held virtually instead. To resolve this issue, a brief video detailing the study and encouraging participation was recorded by this researcher and distributed via email to the teachers in School A and School B. Additionally, the researcher was later able to visit each classroom in School A to inquire about participating and distribute paper copies of the materials to the volunteers. In fact, this proved to be helpful, as a few more teachers in School A ended up volunteering to participate upon speaking with the researcher in person. However,

COVID-19 restrictions in the district prevented physical access to School B and the classrooms there. It is possible that more teachers from School B may have volunteered if the researcher were able to connect with them in person.

Teachers were also aware that their responses would be confidential, but not anonymous. It is possible that some teachers may not have felt comfortable sharing their responses about their career experiences, cultural competence training, or their referral information with the researcher.

Lastly, the study alluded to implications of the educational system regarding racially and ethnically diverse children. It is possible that teachers did not feel comfortable with participating in the study when considering the current and historical climate regarding race relations in the United States, as well as the demographics of the student population whom the teachers serve. Although these issues may have decreased the sample size, approximately 41% of teachers in the school participated, which is a reasonable rate of participation.

#### ***Number of Referrals due to COVID-19 Pandemic***

Data collection for this study occurred during the COVID-19 pandemic. While some of the impacts were noted above (e.g., virtual staff meetings, inability to access School B), the pandemic also likely impacted available student data for both schools. The COVID-19 pandemic disrupted in-person learning across the nation and beyond, leading to school closures from March 2020 through June 2020. As noted by one administrator in School B, MTSS referrals were not collected during this time since both students and educators became remote, and the referral process had been temporarily discontinued (at

least for the remainder of the 2019-2020 school year). Consequently, the referrals during the 2019-2020 school years were fewer than typically expected.

It is common for referrals to be submitted in the spring of the school year, usually after teachers have enough data to support the reason for referral. The COVID-19 pandemic resulted in the absence of these referrals. This affected the third hypothesis, which explored the average timing of MTSS referrals.

The COVID-19 pandemic may have also impacted referrals during the 2020-2021 school year. During this year, the district required that students either attend school in person or remotely. For the students who were remote and seemed to be struggling behaviorally and/or academically, referrals were typically not submitted, per the discretion of the school building's directors. This was due to a lack of available data on the student's functioning and a prolonged interruption to the student's typical learning style and environment, which was in-person learning.

### **Future Research**

The results of the current study may have been impacted by challenges in its design and implementation. However, the study may be improved in the future to provide results in a more meaningful context. First, teachers would be recruited from more schools than the two included in the study. This would improve likelihood of obtaining a much larger and representational sample. By doing this, the results would be more reliable, conclusions can be obtained with greater accuracy, and the sample would better reflect the teacher population. Similarly, by including more schools, a more diverse group of students can be represented, beyond the two primary racial/ethnic groups (African American and Hispanic/Latino) in the current study. By diversifying the student group, it

may more accurately mirror the current racial/ethnic makeup of the student population in the United States, thus becoming a more representational sample. Other racial/ethnic groups were unable to be included in the current study, such as White/Caucasian, American Indian or Alaska Native, Asian, or Native Hawaiian or Other Pacific Islander. This would allow for clearer comparison between races of teachers and students. Moreover, the concept of overrepresentation, as discussed earlier in the manuscript, would be able to be explored with the addition of these racial/ethnic groups in the study.

Measuring cultural competence and teaching others to become culturally competent have proven to be difficult to execute in practice (Bustamante et al., 2016; Smith & Glenn, 2019; Tormala et al., 2018). Measuring cultural competence has generally occurred in three ways: self-report scales, self-reflection, and teacher training experiences. Reyes (2009), Lopes-Murphy and Murphy (2016), and Mahatmya and colleagues (2016) all utilized self-report measures for cultural competence among teachers. If the study were to be improved, teachers could be asked to provide their transcripts to see their coursework experiences, instead of relying on memory. Another possibility is to interview teachers to gain additional information and insight about their experiences, as well as their perceptions of MTSS in their school settings. For instance, the current study did not ask teachers to quantify their training experiences, or to provide any context to the type of experiences. Each multiculturalism experience was considered equally, despite the possibility that some are more comprehensive than another--thus, possibly providing a higher quality of cultural exposure. These details were unable to be determined through the current methodology design.

The majority of teachers in the current study reported not having any cultural competence training experiences. Additionally, the teachers, on average, had longevity in their careers. Since cultural competence training is fairly new and has been a requirement in teacher training programs within the past several years, it is likely that veteran teachers did not have this type of experience. The current study focused on training both pre- and in-service. However, if the study were to be improved, it may be more worthwhile to shift focus to how districts are preparing teachers while in the field. On average, teachers reported having roughly one multicultural experience as a certified teacher. However, research has supported the importance of teachers developing this skill to support student success (Bustamante et al., 2016; Gay, 2002). In order to provide training in the field, a cultural competence training experience can be provided by the district (e.g., use of the REST-KIT in Rogers-Sirin & Sirin, 2009), and the teachers' MTSS referrals can be examined before and after this experience. If training occurs in-house through the district, this allows for greater control over its intent, design, quality, and implementation. The district would be able to dictate how cultural competence skills will be taught and addressed with its teachers. Similarly, districts can tailor the training experience to address issues within their referral process. If teachers are encountering difficulty with data collection, completing a referral, or interpreting student behavior, the district may wish to create training opportunities to target these concerns.

The MTCS can also continue to be used, especially as another pre- and posttest measure on cultural competence before and after the training experience. The data can be used to present to the district on the usefulness of cultural competence in the field,

especially to encourage further training opportunities, and any observed impacts on MTSS referrals.

The current study did not explore how MTSS is implemented in the school system. In reflecting on this study, cultural competence experiences, as well as the number and timing of the MTSS referrals were addressed as focal points. However, this researcher is also interested in the process behind the referral, or the MTSS process itself. In considering research on MTSS, overrepresentation and cultural competence, MTSS can be impacted by more complex factors including a lack of cultural competence, internalized biases, inappropriate referrals, and the contribution to disproportionality. The number or timing of MTSS referrals are irrelevant if the system itself is flawed--for example, if MTSS referrals are routinely accepted, even without the appropriate data. The MTSS referral process may be affected by a lack of knowledge or awareness on the educator's behalf, whether it is a teacher, administrator, or other school-based professional. This is especially concerning given that teachers are often the first line of defense in supporting student needs. In fact, challenges in MTSS data collection and maintenance of referrals arose in at least one of the schools in the study, per the school administrator: School A produced minimal referrals, to the surprise of the administrator, despite MTSS meetings being held regularly. This leads to a question of whether students were evaluated for special education services, for instance, without intervention and progress monitoring data from the MTSS team.

Teachers can also share their experiences with learning and functioning within the MTSS framework. Since it is still considered relatively new in the educational system, teachers may experience a variety of challenges as they learn to instruct and support

student needs within this realm. Feedback from teachers on their district's implementation and use of MTSS can, in turn, guide educational leaders on how to support them and the students.

In order for MTSS to function effectively and support students in the way it was intended, there has to be a clear, objective process that is upheld for the school team to follow. This is especially necessary as to avoid pitfalls that may contribute to issues involving disproportionality and overrepresentation. As this is a relatively new framework which schools are continuing to develop and implement, more research is needed in this area.

### **Implications of Findings**

Although the results of the current study were not significant, they can still be used to inform the field of school psychology and encourage research in teacher training, cultural competence, and the MTSS framework in schools.

As stated earlier, a number of teachers reported having zero courses rooted in multiculturalism. As a group, the teachers within this study were highly experienced and had longevity in their careers, with many having 20 or more years in the field. Considering this, it is quite possible that multicultural courses did not exist in teacher preparation programs back then. Skill development related to race, culture, ethnicity, and related topics currently seem to be essential for teachers. However, veteran teachers need the opportunity to develop these skills as well--if not able to receive it in-training, then in their current positions in-field. Yet, on average, participants had roughly one experience in their preparation programs and one experience in the field since becoming a certified teacher. Existing research highlights the importance of cultural competence for educators,

especially to support student academic growth and foster student-teacher relationships. More development is needed in both preparation programs and in the field for teachers to have the opportunity to receive and be exposed to culturally stimulating experiences.

CAEP serves as the governing body for teacher preparation programs and has requirements for cultural competency training. However, a structured, consistent program or curriculum has yet to be established. Consequently, training programs have the flexibility to choose how to instruct their teachers in this skillset (Sandell & Tupy, 2015). It is possible that a lack of consistent curricula(s) has lent to the shortcomings in cultural competence training which teachers continue to experience. Research suggests that teachers often start their careers without the skills necessary to be sensitive towards cultural differences (Lambeth & Smith, 2016; Milner et al., 2003). This indicates that teachers likely continue to enter the field lacking some of the essential skills needed to teach racially/ethnically diverse students effectively and appropriately. Further development in cultural competence training and curriculum for preservice teachers appears to be needed.

Overrepresentation was highlighted earlier in this manuscript, as a historical issue in education. While this study did not examine overrepresentation directly, several findings may be related to the issue or are reminiscent of factors that may contribute to overrepresentation. This includes difficulty measuring cultural competence, a lack of training curriculum, and teachers' minimal experiences in multiculturalism, as reported in this study. More research is needed in order to determine the current presence and impact of overrepresentation in the education system, particularly for students belonging to racial/ethnically diverse groups.

Overall, little research currently exists on teachers' cultural competence training experience and MTSS referrals in school. Further research in this field can aid in learning and understanding how to support both preservice and current teachers in their training experiences, creating and providing training experiences, providing educational opportunities for learning about MTSS, and examining MTSS practices within a school district.

### **Summary**

Cultural competence has been supported in research as a critical component of teachers' skills, especially in working with children belonging to racial/ethnic minority groups (e.g., Gay, 2002; Keengwe, 2010; Lambeth & Smith, 2016). Cultural competence is noted to have positive impacts on the learning environment (e.g., Ahram et al., 2011; Bustamante et al., 2016), yet it is an area in which teachers tend to have limited experience and exposure prior to entering the field. The MTSS framework is utilized in schools to address students' academic, behavioral, and social/emotional concerns, while targeting areas for improvement to promote academic success. Cultural competence can be essential to this process, as these skills are necessary in understanding student behaviors and presentation, and considering them within the context of culture to avoid possibly making an inappropriate referral.

Limited research exists that addresses the relationship between cultural competence training for teachers and referrals to special education (Reyes, 2009). The current study examined the relationship between teachers' cultural competence and their MTSS referrals for academic and behavioral concerns among ethnic minority students. The results of the study were not significant, as no significant relationships were found

between teachers' cultural competence training and self-perceived competence, and their MTSS referrals or timing of referral. However, this was likely due to a limited sample size and barriers in methodology and implementation. Future research can be conducted in order to further explore the relationship between teachers' cultural competence and their MTSS referrals, as well as preservice teachers' training experiences, the MTSS process in schools, and continued professional development for teachers in the field.

School psychologists serve as multifaceted members in the educational system, often supporting school teams in processes such as MTSS. With knowledge and awareness of issues that continue to impact the educational system, including lack of cultural competence and overrepresentation, school psychologists can advise and support other educators in reforming the system and appropriately addressing student needs. This research can provide school psychologists with information to improve development in the MTSS process and teacher training, particularly in the field where teachers may lack continued opportunities for growth and development in cultural competence.

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**Table 1***Racial/Ethnic Demographics of Participants*

Race/Ethnicity	School A		School B		Full Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
White/Caucasian	9	50	7	63.6	16	55.2
Black/African American	7	38.9	3	27.3	10	34.5
Hispanic/Latino	1	5.5	1	9.1	2	6.9
Other	1	5.5	0	0	1	3.4
Total	18		11		29	

*Note.* American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander were all options for race/ethnicity; however, no participants identified within these categories.

**Table 2***Gender Demographics of Participants*

Gender Identity Category	School A		School B		Full Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Male	3	16.7	0	0	3	10.3
Female	15	83.3	10	90.9	25	86.2
Gender variant/nonconforming	0	0	1	9.1	1	3.4
Total	18		11		29	

**Table 3***Educational Attainment of Participants*

Highest Degree Obtained	School A		School B		Full Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Masters	13	72.2	7	63.6	20	69
Advanced certification	5	27.8	3	27.3	8	27.6
Doctorate	0	0	1	9.1	1	3.4
Total	18		11		29	

**Table 4***Teachers' Certification Area*

Specialty Area	School A		School B		Full Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Early childhood education	2	11.1	0	0	2	6.9
Elementary education	12	66.7	7	63.6	19	65.5
Special education	2	11.1	1	9.1	3	10.3
Other <sup>a</sup>	2	11.1	3	27.3	5	17.2
Total	18		11		29	

*Note.* Secondary education was another option for teachers' certification areas; however, this was not endorsed by any participants.

<sup>a</sup> Participants who selected this option identified their specialty areas as bilingual/TESOL education, physical education, art, K-12 and reading consultant certification, and K-12 and adult education certification.

**Table 5***Number and Average Monthly Timing of Teachers' MTSS Referrals*

Participant Number	Number of Referrals	Average Monthly Timing of Referrals <sup>a</sup>
3	1	6.0
5	2	7.0
17	8	4.0
18	7	6.0
19	1	7.0
21	1	6.0
22	2	8.0
24	5	6.8
29	2	6.5

<sup>a</sup> M = 6.37, SD = 1.10, range = 4-8.

**Table 6***Number of Multicultural Courses Taken by Teachers*

Number of Multicultural Courses	<i>N</i>
0	9
1	12 <sup>a</sup>
2	4
3	3
4	0
5	0
6	0
7	0
8	0
9	1

*Note.*  $M = 1.31$ ,  $SD = 1.75$ , range = 0-9.

<sup>a</sup> Mean substitution for this variable was used to replace missing responses from eight participants. Therefore, eight participants' responses were replaced by the mean ( $M = 1$ ), while the other four participants actually reported that they had taken one course.

**Table 7**

*Mean, Standard Deviation, and Range of Multicultural Experiences as a Student and Teacher*

Setting of Multicultural Experience	<i>M</i>	<i>SD</i>	Range
As a student in preparation program	1.6	1.4	0-5
As a certified teacher	1.2	0.9	0-3

**Table 8***Frequencies of Participants' Multicultural Experiences as a Student and Teacher*

Number of Experiences	As a student in program	As a certified teacher
No experiences	6	5
One experience	12	16
Two experiences	4	5
Three experiences	4	3
Four experiences	1	0
Five experiences	2	0
Total	29	29

**Table 9**

*Frequencies of Types of Participants' Multicultural Experiences as a Student and Teacher*

Type of Experience	<i>N</i>	Type of Experience	<i>N</i>
	As a student		As a certified teacher
Field placement	3	In-district PD	18
Internship	3	Out-of-district PD	6
Student teaching	10	Professional conference	5
Completed research	2	Other	3
Attend professional conference	7	No training experiences	5
Masters' thesis	1		
Doctoral dissertation	0		
Read books or articles outside of coursework	17		
Other	2		
No training experiences	7		

**Table 10***Multiple Regression Analyses of Relationships Between Cultural Competence, MTSS**Referrals, and Timing of MTSS Referrals*

DV	IV	Referral Type								
		Academic			Behavioral			Overall Referrals		
		<i>B</i>	$\beta$	SE	<i>B</i>	$\beta$	SE	<i>B</i>	$\beta$	SE
MTSS Referrals	Constant	.705	--	.930	.432	--	.392	1.317	--	1.309
	CCTRAIN	.016	.033	.099	-.067	-.318	.042	-.063	-.094	.139
	Race	.254	.086	.610	-.079	-.061	.257	.187	.045	.858
	EXP	-.013	-.077	.033	.003	.041	.014	-.008	-.035	.046
MTSS Referrals	Constant	-.506	--	2.073	.892	--	.908	.525	--	2.952
	MTCS	.285	.133	.424	-.180	-.191	.186	.100	.033	.604
	Race	.276	.093	.588	-.001	-.001	.257	.305	.073	.837
	EXP	-.012	-.073	.033	.004	.049	.014	-.007	-.028	.047
Timing AVG	Constant	--	--	--	--	--	--	6.330	--	5.792
	MTCS	--	--	--	--	--	--	-.299	-.109	1.158
	Race	--	--	--	--	--	--	.642	.292	.920
	EXP	--	--	--	--	--	--	.046	.246	.079

*Note.* The first and second regressions included three models: academic, behavioral, and

overall MTSS referrals. The third regression contained one model, for overall referrals.

None of the relationships were significant. DV = Dependent Variable; IV = Independent

Variable; SE = Standard Error; CCTRAIN = Teachers' cultural competence training

experiences; MTCS = Averages of teachers' total MTCS score; Race = Teachers' race,

with racial/ethnic minority groups as reference group; EXP = Teachers' years of

experience.

**Appendix A: Demographic Questionnaire**

2. What is your race/ethnicity? (circle your response)
  - a. White/Caucasian
  - b. Black/African American
  - c. Hispanic/Latino
  - d. American Indian or Alaska Native
  - e. Asian
  - f. Native Hawaiian or Other Pacific Islander
  - g. Other (please specify): \_\_\_\_\_
3. With which gender identity do you most identify?
  - a. Male
  - b. Female
  - c. Transgender Male
  - d. Transgender Female
  - e. Gender variant/nonconforming
  - f. Other (please specify): \_\_\_\_\_
4. What grade level(s) do you currently teach? \_\_\_\_\_
5. How many years of experience as a teacher do you have? \_\_\_\_\_
6. What type of teaching certification do you hold?
  - a. Initial Educator Certificate
  - b. Provisional Educator Certificate
  - c. Professional Educator Certificate
  - d. Other (please specify): \_\_\_\_\_
7. What is your highest level of educational attainment?
  - a. Completed 2-year college
  - b. Completed 4-year college
  - c. Completed Masters' level program
  - d. Completed advanced program – Advanced certification
  - e. Completed advance program – Doctorate degree
8. In which specialty area is your teaching degree?
  - a. Early Childhood Education
  - b. Elementary Education
  - c. Secondary Education
  - d. Special Education
  - e. Other (please specify): \_\_\_\_\_
9. How many multicultural courses (i.e., focused primarily on multiculturalism in education) have you taken as a graduate student? \_\_\_\_\_

10. Please circle all the options below that best describe your training experiences in multiculturalism and/or related topics **as a graduate student**:
- a. Field placement
  - b. Internship
  - c. Student teaching
  - d. Completed research
  - e. Attended professional conference
  - f. Masters' thesis
  - g. Doctoral dissertation
  - h. Read books or articles outside of coursework
  - i. Other (please specify): \_\_\_\_\_
  - j. No training experiences
11. Please circle all the options below that best describe your professional experiences in multiculturalism **as a certified teacher**:
- a. In-district professional development (e.g., workshop, webinar, or seminar)
  - b. Out-of-district professional development (e.g., local workshop, out-of-state seminar, webinar)
  - c. Professional conference (e.g., professional conference that focuses on multiculturalism)
  - d. Other (please specify): \_\_\_\_\_
  - e. No training experiences

**Appendix B: Referral Form****Request for Individual Review**

Student name: _____	Date of Birth: _____
Gender ____ M ____ F	Grade: _____
Date of referral to SST: _____	

Teacher name/Other Teacher(s)	Person making the request (if different)
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**Contact Information**

Room	Address	Language spoken at home
Parent/Guardian contacted prior to ISR referral? ____ Yes ____ No	Date(s) of contact	Parent/Guardian(s) Concerned? ____ Yes ____ No
Parent/Guardian(s) names	Best form of contact (Note/Phone/Email)	Parent/Guardian telephone/email: Home: Work: Mobile: Email:

<b>Reading level based on:</b>  <b>MAP:</b> _____  <b>Dibels:</b> _____  <b>Curriculum:</b> _____  <b>Other:</b> _____	<b>Math level based on:</b>  <b>MAP:</b> _____  <b>Curriculum:</b> _____  <b>Other:</b> _____	<b>504? ____ ELL? ____</b>  <b>Previous school history:</b>   <b>Student retained? Yes ____ No ____</b> <b>If yes, what grade?</b>	<b>Medication(s)/Other relevant health data such as vision and/or vision</b>   <b>Medical diagnosis:</b>
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## About Student

### Reason for referral:

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Documentation must be provided for each student concern so please make sure all documentation is provided with each referral. Data is used by the ISR to determine appropriate interventions. **[Note: ISR/SRBI Referral Forms that do not contain adequate documentation will be returned]**. The following are examples of the types of evidence that may be used to support the SRBI/ISR process. Gather your supporting evidence, check off each type of evidence that you are submitting, and attach the evidence to the SRBI/ISR Referral Form.

- ☐ Student work sample
- ☐ Observations
- ☐ Class quizzes and tests
- ☐ Curriculum-based measures
- ☐ Student portfolio
- ☐ Parent interview notes or audiotape
- ☐ Interviews with colleagues and/or specialists (summary notes)
- ☐ Functional based assessment, Behavior Intervention Plans (BIP), any and all assessments
- ☐ Attendance records (**include days absent, days tardy, and days truant**)
- ☐ Record of out-of-class referrals (**e.g. to the office for discipline, ISS, OSS, discipline data**)

Revised 9/1/2017

### Areas of Strength (Check all that apply)

<b>Academic:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> High achievement on tests and quizzes</li> <li><input type="checkbox"/> Does well on classwork</li> <li><input type="checkbox"/> Motivated to do well</li> <li><input type="checkbox"/> Organized</li> <li><input type="checkbox"/> Follows direction</li> <li><input type="checkbox"/> Participates in class activities</li> <li><input type="checkbox"/> Hands in homework consistently</li> </ul> <b>Literacy:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Phonological awareness</li> <li><input type="checkbox"/> Vocabulary</li> <li><input type="checkbox"/> Comprehension</li> <li><input type="checkbox"/> Fluency</li> <li><input type="checkbox"/> Written expression</li> </ul>	<b>SOC/Emotional/Behavioral</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Manages conflict with peers well</li> <li><input type="checkbox"/> Has clear personal talent/skills</li> <li><input type="checkbox"/> Possess leadership qualities</li> <li><input type="checkbox"/> Verbalizes needs appropriately</li> <li><input type="checkbox"/> Is friendly and outgoing</li> <li><input type="checkbox"/> Involved in extra - curricular activities (e.g. sports, clubs, athletics, creative arts)</li> <li><input type="checkbox"/> Other: _____</li> </ul> <b>Math</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Numbers/Operations</li> <li><input type="checkbox"/> Operations/Algebraic</li> </ul>	<b>Family</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Involved in academics/social support</li> <li><input type="checkbox"/> Extended family support</li> <li><input type="checkbox"/> Home/School partnership</li> <li><input type="checkbox"/> Other: _____</li> </ul> <b>Health</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Physical activity</li> <li><input type="checkbox"/> Alert/Engaged</li> <li><input type="checkbox"/> Healthy sleeping habits</li> <li><input type="checkbox"/> Teeth in good condition</li> <li><input type="checkbox"/> Hygiene</li> <li><input type="checkbox"/> Other: _____</li> </ul>
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<input type="checkbox"/> Writing structure	<input type="checkbox"/> Measurements/Data	
<input type="checkbox"/> Organization	<input type="checkbox"/> Geometry	

**Areas of concern (Check all that apply)**

<p><b>Academic</b> (Literacy &amp; Math)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Grades declining</li> <li><input type="checkbox"/> Disorganized</li> <li><input type="checkbox"/> Slow rate of work</li> <li><input type="checkbox"/> Incomplete assignments</li> <li><input type="checkbox"/> Does not follow directions</li> <li><input type="checkbox"/> Low rate of retention</li> </ul> <p><b>Behavioral</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Verbally disruptive</li> <li><input type="checkbox"/> Requires frequent prompts</li> <li><input type="checkbox"/> Physically disruptive</li> <li><input type="checkbox"/> Physically aggressive</li> <li><input type="checkbox"/> Verbally aggressive</li> <li><input type="checkbox"/> Sexually aggressive</li> <li><input type="checkbox"/> Victim of bullying</li> <li><input type="checkbox"/> Difficulty with transitions</li> <li><input type="checkbox"/> Difficulty with social settings</li> </ul> <p><b>Health/Medical</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Body odor/poor hygiene</li> <li><input type="checkbox"/> Dental</li> <li><input type="checkbox"/> Vision</li> <li><input type="checkbox"/> Hearing</li> </ul> <p><b>Family</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Domestic Violence</li> <li><input type="checkbox"/> Limited access to resources</li> <li><input type="checkbox"/> Isolation</li> <li><input type="checkbox"/> Divorce: Recent/In progress</li> <li><input type="checkbox"/> Lack of parental boundaries</li> <li><input type="checkbox"/> Lack of after-school supervision</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Poor writing Skills</li> <li><input type="checkbox"/> Poor reading skills</li> <li><input type="checkbox"/> Poor math skills</li> <li><input type="checkbox"/> Poor study skills</li> <li><input type="checkbox"/> Gives up easily</li> <li><input type="checkbox"/> Inconsistent grades</li> <li><input type="checkbox"/> Bullies others</li> <li><input type="checkbox"/> Frequently leaves seat</li> <li><input type="checkbox"/> Frequently speaks out</li> <li><input type="checkbox"/> Destroys property</li> <li><input type="checkbox"/> Easily distracted</li> <li><input type="checkbox"/> Argumentative/defiant</li> <li><input type="checkbox"/> Shy/withdrawn</li> <li><input type="checkbox"/> Appears angry/hostile</li> <li><input type="checkbox"/> Does not accept consequences</li> <li><input type="checkbox"/> Uncoordinated/clumsy</li> <li><input type="checkbox"/> Agitated/nervous</li> <li><input type="checkbox"/> Smells of smoke/alcohol</li> <li><input type="checkbox"/> Complains of nausea</li> <li><input type="checkbox"/> Death of caregiver/family member</li> <li><input type="checkbox"/> Sick caregiver/family member</li> <li><input type="checkbox"/> Alcohol use/abuse</li> <li><input type="checkbox"/> Substance use/abuse</li> <li><input type="checkbox"/> Frequent home transitions</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Does not work well independently</li> <li><input type="checkbox"/> Does not work well with others</li> <li><input type="checkbox"/> Other: _____</li> <li><input type="checkbox"/> Cries often</li> <li><input type="checkbox"/> Agitated/nervous</li> <li><input type="checkbox"/> Steals/cheats/lies</li> <li><input type="checkbox"/> Avoided by peers</li> <li><input type="checkbox"/> Easily frustrated</li> <li><input type="checkbox"/> Truant/tardy</li> <li><input type="checkbox"/> Appears depressed</li> <li><input type="checkbox"/> Attention seeking</li> <li><input type="checkbox"/> Other: _____</li> <li><input type="checkbox"/> Evidence of self-mutilation</li> <li><input type="checkbox"/> Sleeps in class/lethargic</li> <li><input type="checkbox"/> Appears sickly</li> <li><input type="checkbox"/> Other: _____</li> <li><input type="checkbox"/> Caregiver unemployed</li> <li><input type="checkbox"/> Language barrier</li> <li><input type="checkbox"/> Homelessness</li> <li><input type="checkbox"/> DSS involvement</li> <li><input type="checkbox"/> Other: _____</li> </ul>
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## Tier 1/Tier 2

### Classroom Interventions Previously Tried

What strategies have been used to address the students concern (s) prior to the SRBI? (Check all that apply)

Interventions	Tiered systems of support (e.g. Academic, Behavioral, ELL)	How long tried?	Results/Outcomes
<input type="checkbox"/> Instructional accommodations (e.g. interventions, small group, pacing seating, differentiations of instruction, etc.) <b>Please Specify:</b>	<input type="checkbox"/> Academics		
<input type="checkbox"/> Material modifications (e.g. large print, technology, etc. Please specify:	<input type="checkbox"/> Academics		
<input type="checkbox"/> English as a second language support	<input type="checkbox"/> ELL		
<input type="checkbox"/> Daily behavior chart	<input type="checkbox"/> Behavior		
<input type="checkbox"/> Contract	<input type="checkbox"/> Behavior		
<input type="checkbox"/> Reward positive behavior program	<input type="checkbox"/> Behavior		
<input type="checkbox"/> Rearranging physical setting	<input type="checkbox"/> Behavior		
<input type="checkbox"/> Peer mediation	<input type="checkbox"/> Behavior		
<input type="checkbox"/> Time out, buddy classroom, etc.	<input type="checkbox"/> Behavior		
<input type="checkbox"/> Conference with student	<input type="checkbox"/> Behavior		
<input type="checkbox"/> Parent conference	<input type="checkbox"/> Other		
<input type="checkbox"/> Attendance monitoring	<input type="checkbox"/> Other		

### Current Support Services

<input type="checkbox"/> After School <input type="checkbox"/> Before School <input type="checkbox"/> Classroom intervention <input type="checkbox"/> Mentoring	<input type="checkbox"/> Counseling <input type="checkbox"/> Tutoring <input type="checkbox"/> Attendance support	<input type="checkbox"/> Medical <input type="checkbox"/> Summer program <input type="checkbox"/> Other
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**\*Please return form to:** \_\_\_\_\_

**Tier II Behavior Support Request****1. Behavioral Concerns:** *(Check all that apply)*

<input type="checkbox"/> Verbally disruptive	<input type="checkbox"/> Bullies others	<input type="checkbox"/> Attention seeking behaviors
<input type="checkbox"/> Physically disruptive	<input type="checkbox"/> Destroys property	<input type="checkbox"/> Steals/cheats/lies
<input type="checkbox"/> Physically aggressive	<input type="checkbox"/> Easily distracted	<input type="checkbox"/> Avoided by peers
<input type="checkbox"/> Verbally aggressive	<input type="checkbox"/> Hostile when criticized	<input type="checkbox"/> Easily frustrated
<input type="checkbox"/> Victim of bullying	<input type="checkbox"/> Argumentative/defiant	<input type="checkbox"/> Truant/tardy
Other:		

**Fill in chart below:**

Question	Notes:
What does the student's behavior look like?	
How often and how long does the student's behavior occur?	
Where does the student's behavior occur?	
What usually happens right before the student's behavior occurs?	
What usually happens right after the student's behavior occurs?	

**Biographical Statement**

Shanay Ferguson is a practicing school psychologist residing in the state of Connecticut. She graduated from Syracuse University in May 2012 with a Bachelor of Arts degree, having completed a double major in Psychology and African American Studies. She continued her education at Alfred University and received her Master of Arts degree in May 2014. She pursued her research interests in racial/ethnic diverse students, disproportionality, and schoolwide systems and is anticipating her Doctorate in School Psychology in May 2022. She can be reached via email at [sjfergus1691@gmail.com](mailto:sjfergus1691@gmail.com).