

**Exploring the Relationship Between Teachers' Perceptions
of Cultural Responsiveness, Student Risk, and Classroom Behavior**

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Abstract

It is important to explore the relationship between teachers' perceptions of their cultural responsiveness as well as students' classroom behavior and risk, as these relationships may impact decisions about equitable access to school behavioral health supports. This paper includes two studies conducted with teachers in two large suburban school districts. Study 1 investigated the relationship between teachers' ($n = 20$) ratings on a measure of cultural responsiveness, the *Assessment of Culturally and Contextually Relevant Supports (ACCRoS)*, and students' classroom behavior. Results indicated that higher ACCRoS scores significantly predicted lower classwide disruptive behavior. Study 2 investigated the relationship between teachers' ($n = 30$) ratings on the ACCRoS and ratings of their students' risk on the *Social, Academic, and Emotional Behavior Risk Screener (SAEBRS)*. For social behavior, higher ACCRoS scores predicted teachers perceiving lower social risk; however, identification as a Black student and a student with a disability predicted higher risk. Findings are preliminary, yet implications include recommendations for high-quality professional development to promote teacher cultural responsiveness. Such support could guide teachers to create educational environments in which fewer discipline referrals for behavior occur, students exhibit reduced social risk, and access to school behavior supports is more equitable.

Keywords: teachers, cultural responsiveness, behavioral health, equity, risk

**Exploring the Relationship between Teachers' Perceptions
of Cultural Responsiveness, Student Risk, and Classroom Behavior**

Despite a recent decline in the use of exclusionary discipline practices in U.S. schools (Musu et al., 2019), racially and ethnically minoritized (REM; Proctor & Owens, 2019) youth remain disproportionately referred to the office (Anyon et al., 2017), suspended (Ksinan et al., 2019) and expelled (Bal et al., 2019). Black and Native American youth in particular are also more likely than their White peers to be identified to receive special education services for emotional disturbance (Bal, 2019; Donovan & Cross, 2002) and placed in more restrictive special education settings (Skiba et al., 2006). Exclusionary discipline and restrictive special education placements can decrease students' academic achievement (Morris & Perry, 2016) and rates of school completion (Marchbanks & Blake, 2018; Oelrich, 2012), as well as increase the likelihood of contact with the justice system (Erickson, 2012; Noltemeyer et al., 2015).

To address disproportionality related to discipline (Vincent et al., 2011) and special education (Kramarczuk Voulgarides, et al. 2017), researchers and policymakers have emphasized the need to focus on prevention and have proposed implementing a multi-tiered system of support (MTSS) framework (Bradshaw et al., 2012; Green et al., 2019). The implementation of MTSS involves educators providing high-quality, evidence-based instruction and behavioral supports to all students (Tier 1; Sugai & Horner, 2009). Data are collected and used to make decisions about which students are responding to Tier 1 practices and which students might benefit from more targeted intervention (Tier 2) or individualized support (Tier 3) (Eagle et al., 2015).

Perception of Student Risk

When considering students' response to social and behavioral supports in schools, educators often consider office discipline referral (ODR) data and universal screening scores. Although these data sources are well-researched (e.g., Allen et al., 2019; Gregory et al., 2020; Predy et al., 2014) and predictive of outcomes such as risk for suspension (Naser et al., 2018), both are reliant upon teachers' perceptions of student behavior. For ODRs, subjectively defined problem behaviors (e.g., disruption) and teachers' implicit bias have been linked to racial discipline disproportionality (Girvan et al., 2017), particularly for Black youth (Bradshaw et al., 2010). Universal screening has been described as less biased (Dever et al., 2016; Raines et al., 2012), yet there is emerging evidence that screening results are influenced by teacher and student demographic variables, including race (McLean et al., 2019; Weathers, 2019). In particular, findings from a recent preliminary study indicated Black students may be rated at greater social-emotional-behavior risk relative to students of other races (Izumi, 2020). Also, there is evidence that parents and teachers differ significantly in their assessment of student risk, particularly for Black youth (Schanding & Nowell, 2013).

This is concerning given the possibility of false positive screening results in school, especially within the early grades and when using single-gate screening procedures (Fuchs et al., 2012). False positives on a screening measure due to teachers' implicit bias, and the increased surveillance that typically accompanies students identified as at risk, could lead to stigma and unnecessary intervention that could potentially remove students from the learning environment (Levitt et al., 2007). Students' inequitable (or overrepresented) access to supports, particularly low-quality supports, may lead to judgments about non-response in an MTSS context. As such, referral to special education may occur and perpetuate existing disparities (e.g., Black students

identified with emotional disturbance, placed in more restrictive settings with a less rigorous curriculum; Losen & Welner, 2001; Zhang et al., 2014).

Support to School Personnel

Acknowledging enduring educational disparities, researchers have long called upon educators to bring awareness to their biases and strive to be *culturally responsive* by valuing students' individual differences in heritage, language, and experience in schools (Gay, 2018). Specifically, educators are encouraged to engage in high-quality professional development to promote effective instructional practice and implementation of behavior supports that are affirming to students' culture and the community context (Powell et al., 2016). However, most educators lack access to such high-quality training opportunities (Ball & Cohen, 1999; McIntosh et al., 2020). This is concerning given the established links between culturally responsive practices (Gay, 2002) and improved behavioral (Fallon et al., 2018; Larson et al., 2018), academic (Cammarota & Romero, 2009; Powell et al., 2016), and social-emotional (Castro-Olivo, 2014) outcomes for students.

To provide efficient, effective training related to culturally responsive practice, school and district leaders might focus on supporting educators to adapt their curricula to reflect students' culture, differentiate instruction to meet diverse student needs, set high expectations, and build strong relationships with students and families (Ladson-Billings, 1995). Targeted data collection can inform decision-makers about teachers' perceptions and assist with designing and implementing valuable, relevant professional development to achieve these aims. One option is to collect teacher self-assessment data related to cultural responsiveness in the classroom (Siwatu, 2007; Siwatu et al., 2015). Self-assessment data may offer educators a chance to engage in reflection, be perceived by educators as non-evaluative (Biggs et al., 2008), and provide

school leaders with useful data to drive training decisions. Teacher self-assessment data may also help teachers set their own individual goals, monitor progress, and create individualized action plans to improve their practice (Fallon et al., 2018). Although teacher self-assessments may be a promising option, research is needed to understand if teachers' perceptions of their cultural responsiveness are related to meaningful outcomes in the classroom.

Purpose of Study

The purpose of this paper is to provide a preliminary investigation of the relationship between teachers' perceptions of their cultural responsiveness, students' risk and observers' ratings of classroom behavior. Research is needed to explore the relationship between teachers' perceptions of their cultural responsiveness and student outcomes, specifically classroom behavior. If higher ratings on a measure of cultural responsiveness are associated with better student behavior (e.g., less disruptive behavior), it may stand to reason that teachers who engage in more culturally responsive practice might have better classroom climates with fewer referrals for discipline. This may be important for REM youth who have historically been disciplined disproportionately due to teacher bias, ultimately promoting more equitable access to school behavioral health supports.

In addition, prior research has not yet explored the relationship between teachers' perceptions of their cultural responsiveness and perceptions of students' social, emotional and behavioral risk. If teachers who report higher levels of cultural responsiveness also report lower student risk, results might again support the value of promoting teachers' culturally responsive practice as this may impact teachers' perceptions of classroom behavior leading to fewer students being identified as at risk. This may then reduce the likelihood that REM students are inappropriately identified as being at risk on a social, emotional, and behavioral screener due to

teacher bias. If screening data are not influenced by teacher bias, access to school behavioral health supports might be more equitable.

To explore the potential relationships described above, this paper presents two related studies. Study 1 addresses the first research question below whereas Study 2 addresses the second:

1. What is the relationship between teachers' self-assessment ratings of cultural responsiveness and classwide estimates of student academic engagement and disruptive behavior?
2. What is the relationship between self-assessment ratings of cultural responsiveness and teachers' perceptions of students' academic, emotional, social, and overall risk on a universal screening instrument?

Study 1

Participants

Twenty teachers and 454 students from eight schools in two large suburban public school districts in the Northeast participated in Study 1. The majority of teachers were female (90%) and white (85%), with 11 years or more teaching experience (65%). Sixty percent of teachers taught in elementary schools, twenty percent in middle schools and twenty percent in high schools. The majority of students were identified by their teachers as REM youth (73%), specifically Latinx (29%), Black (22%), or multiple races/other (23%). Twenty nine percent of students were identified as English Learners (EL). Seventeen percent were identified with disabilities (see Table 1).

Measures

Teacher participants completed a measure of cultural responsiveness, the *Assessment of Culturally and Contextually Relevant Supports* (ACCRoS), as well as a teacher and student demographic form. Two doctoral-level school psychology students conducted three 30-min classroom observations with each teacher using systematic direct observation.

ACCRoS

ACCRoS items were initially generated based on recommendations resulting from the findings of a systematic literature review of culturally relevant classroom supports (Fallon et al., 2012), grounded in Vincent and colleagues' (2011) model of culturally responsive MTSS. Items were subject to content validation by stakeholder and expert panels, as well as exploratory and confirmatory factor analyses with unique large teacher samples (Fallon et al., 2021). The resulting 35-item ACCRoS instrument is divided into three subscales: Equitable Classroom Practices (ECP), Consideration of Culture and Context (CCC), and Access to Information and Supports (AIS).

Items within the ECP factor target teacher practices to promote students' equitable access to high-quality instruction and a safe and supportive classroom environment (e.g., "I plan lessons that are designed to actively engage all learners when I teach", "I deliver praise equitably in my classroom"). Items aligned with the CCC factor target teachers' consideration of students' culture in the design of classroom pedagogy behavioral supports (e.g., "I modify the curriculum to be culturally and contextually relevant, when appropriate", "I understand that some students are at risk for being disproportionately excluded from the learning environment"). Items within the AIS domain target data and systems of support that teachers may access to provide high-quality instruction and behavioral supports (e.g., "I review academic data for trends that reflect

disproportionality”, “I request to meet with support personnel to help me consider cultural and contextual factors that might affect how I support students’ behavior”).

The teachers responded to each item using a 6-point Likert scale: *strongly disagree* (1), *disagree* (2), *somewhat disagree* (3), *somewhat agree* (4), *agree* (5), *strongly agree* (6). Higher scores indicated greater perceptions of cultural responsiveness. The total possible score on the ACCReS was a 210 (35 items x score of 6). The highest possible score on each subscale varied by the number of items on each scale: ECP = 78 (13 items), CCC = 66 (11 items), AIS = 66 (11 items). Previous analyses indicated acceptable fit indices with items loading on to three factors: ECP ($\omega = .87$), CCC ($\omega = .77$) and AIS ($\omega = .86$) (Fallon et al., 2021).

Demographic Questionnaires

Teacher and student demographic forms were used to gather information including gender, race/ethnicity, teachers’ years of teaching experience, as well as students’ grade level, EL status, and disability status. Teachers in each district used information available on the districtwide student information system which included the demographic details (e.g., race, ethnicity, gender) provided by a family member during the school registration for each child.

Systematic Direct Observation

Systematic direct observation was used to measure classwide rates of academic engagement and disruptive behavior. A primary observer conducted three 30-min observations of each classroom. A second observer accompanied the primary observer for one of the three observation. As such, 33% of the total observations were observed by two individuals for the purpose of calculating interobserver agreement (IOA). The first author provided both observers with direct training (instruction, practice, and corrective feedback) to engage in data collection. Specifically, the first author reviewed each data collection form, demonstrated classroom data

collection with the observers and provided a post-observation debrief, and then conducted a classroom observation concurrently with the data collectors. IOA between the first author and the two trained observers was calculated by dividing the total number of agreements by the total number of intervals. During training, IOA was deemed acceptable (90.2%) before observers began data collection on site independently. Throughout the study, IOA was high for academic engagement (97.4%) and disruptive behavior (92.1%).

Observers used a momentary time sampling procedure with an individual-fixed observation scheme, whereas students were observed in the order in which they were seated (Student 1 at Table 1, Student 2 at Table 1, etc.) during consecutive 15-sec intervals (Briesch et al., 2015). At the end of each interval, the student observed was determined to be academically engaged or not. Academic engagement was defined as any instance when a student was actively or passively attending to academic instruction or activities (Fallon et al., 2019). This included writing, raising hand, answering a question, talking about a lesson, listening to the teacher, asking relevant questions, taking notes appropriately, looking at instructional materials, and participating in assigned tasks.

Disruptive behavior was measured using a partial interval recording procedure. Observers recorded if the student being observed engaged in disruptive behavior at any point during the 15-sec interval. Disruptive behavior was defined as behavior that disrupts classroom functioning and/or makes it difficult for others to perform their work (e.g., interfering with academic tasks, calling out, getting out of seat, talking to peer[s], head down on desk; Fallon et al., 2019).

Procedures

Upon approval by the University of (blinded)'s Institutional Review Board, the first author sought teacher participation by obtaining approval from the district superintendents who

then sent the invitation to school principals in six elementary schools (District 1), a middle school and a high school (District 2). Following a meeting with the first author, interested school principals distributed the study invitation letters to all teachers within the building via email. All classroom teachers were eligible to participate in the study. In each school invited, one to four staff members expressed interest in participating (mean = 6%, range = 3 – 13% of total staff in each building). The first author then scheduled an individual meeting with interested teachers to explain the study, answer teachers' questions, obtain informed consent, and schedule classroom observations. Once informed consent was secured for teacher participants, parents in participating classrooms were notified about the study and given the option to opt their child out of study participation. As no parents in any classroom selected this option, all students within each classroom involved in the study participated (i.e., 100% participation rate).

Teachers were asked to identify observation times in which whole group instruction would occur. This would provide observers with the chance to see the teacher engaging in instruction versus facilitating students' small group or independent work. Observers scheduled three observations to occur during the identified instructional period on three different days. At the end of the first observation, teachers were given a study packet including the teacher and student demographic forms. They were asked to complete the student demographic form using a unique code for each student as to mask each student's name and identity. On the last observation day, teachers were provided the ACCReS to complete. Once completed, a member of the research team retrieved the ACCReS from the participant. Participants received a \$50 gift card for taking part in the study.

Statistical Analyses

Descriptive statistics (mean, standard deviation (SD), range) and estimates of reliability were calculated. As the ACCReS produces ordinal data, McDonald's Omega was used to estimate reliability (Trizano-Hermosilla & Alvarado, 2016). Subsequently, a multilevel model analysis was conducted to account for the clustered nature of the data: multiple observations (Level-1) within classrooms (Level-2; Twisk, 2006). Multilevel models were fit using the lme4 package in R version 3.5.1 (Bates et al., 2005). Model parameters were estimated using restricted maximum likelihood. Given the small sample size, all models were fit using random intercepts only. First, two models were fit predicting student engagement and disruptive behavior accounting for variables hypothesized to influence student behavior in the classroom: teacher's years of experience, school level, percentage of REM in the class, percentage of EL students, and percentage of students identified with disabilities. Although the primary predictor was ACCReS score, the model controlled for teacher and students' demographics given previous research that these variables can impact student behavior (e.g., Acosta et al., 2019; Long et al., 2019; Unal & Unal, 2012; Wallace et al., 2002). The model predicting class wide behavior and including ACCReS score is illustrated by the following formula, where Y_{ij} is the dependent variable for observation i within classroom j :

$$Y_{ij} = \gamma_{00} + \gamma_{01} * \text{OBSV_NUMBER}_{ij} + \gamma_{02} * \text{TEACH_EXP}_j + \gamma_{03} * \text{SCL_LEVEL}_j + \gamma_{04} * \text{PERCENT_EL}_j + \gamma_{05} * \text{PERCENT_DIS}_j + \gamma_{06} * \text{PERCENT_REM}_j + \gamma_{10} * \text{ACCRES}_j$$

Akaike information criterion (AIC) was calculated for each model. Then ACCReS score was added to both models. An ANOVA was used to compare AIC for models with and without ACCReS score to describe model fit. Intraclass correlation coefficients (ICC) were computed to evaluate the percentage of variance attributable to Level-2 variables.

Results

The results of the analyses are summarized in Table 2. The average score on the ACCReS scale was 162.6 (SD = 13.78, range 137-189). Reliability estimates indicated excellent internal consistency for total ACCReS score ($\omega_h = .91$), good internal consistency for the AIS subscale ($\omega_h = .87$), and acceptable internal consistency for the ECP ($\omega_h = .72$), and CCC ($\omega_h = .78$) subscales. The AIC for the model predicting student engagement including ACCReS score (AIC = -107.71) was not significantly lower than the AIC for the model predicting student engagement without ACCReS score (AIC = -109.70, $p = 0.92$). ACCReS score was not found to be a statistically significant predictor of student academic engagement. However, the AIC for the model predicting student disruptive behavior with ACCReS score included (AIC = -145.79) was significantly lower in comparison to the model predicting student engagement without including ACCReS score (AIC = -151.87, $p = 0.001$). This suggests data are best represented by the model predicting disruptive behavior with the ACCReS score. ACCReS scores significantly predicted lower student disruptive behavior during the initial classroom observation ($p = 0.001$). Finally, the ICC for student academic engagement was 0.46 and the ICC for student disruptive behavior was 0.18, indicating that between-teacher differences accounted for 46% of the variance in class wide engagement and 18% in disruptive behavior. Variance in scores was also found between schools (Level-3) and districts (Level-4), yet due to the small number of clusters at these levels within the study, the decision was made that analyses would be underpowered and this nesting was ignored for the purpose of the analysis.

Study 2

Participants

A total of 30 teachers (12 from Study 1 and an additional 18 recruited teachers) and 622 students from nine schools participated in Study 2. The majority of teachers were female (86.7%), white (86.7%), and had 11 or more years of experience (56.7%). The majority of students were identified as REM youth (74%), including Black (28%) and Latinx (22%). Twenty-six percent of students were identified as English Learners and 26% were identified with a disability. A series of chi-square tests of independence indicated that there were not significant differences between Study 1 and Study 2 samples with respect to teacher's years of experience ($X^2(16, N = 50) = 4.72, p = 0.99$), school level ($X^2(2, N = 50) = 3.26, p = 0.19$), percentage of students with disabilities ($X^2(21, N = 50) = 9.43, p = 0.98$), percentage of students designated as EL ($X^2(16, N = 50) = 5.07, p = 0.99$), or percentage of REM students in the classroom ($X^2(26, N = 50) = 12.5, p = 0.98$). Teacher and student demographic characteristics are listed in Table 1.

Measures

Teacher participants in Study 2 completed a teacher and student demographic form as well as the ACCReS. As in Study 1, teachers used information from the districtwide student information system to complete the student demographic form. Teachers also completed a universal screener for each student in their classroom. Specifically, teachers completed the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS; Kilgus & von der Embse, 2014), a brief universal screener designed for use with educators teaching grades K-12 to assess students' functioning in three domains: Social Behavior (6 items), Academic Behavior (6 items), and Emotional Behavior (7 items). A Total Behavior (19 items) score is also generated through its use. The items reflect behaviors found to be highly correlated with social and academic success (Eklund et al., 2017). The tool is efficient, requiring 1-3 minutes per student to complete.

Ratings are given via a categorical 4-point scale from 0 (*never*) to 3 (*almost always*) based on the degree to which an item is true for the child being screened. Previous research supports the internal consistency of the SAEBRS subscales ($\alpha = .79 - .94$; Kilgus, et al, 2013; Kilgus et al., 2017).

Procedures

The research team recruited the participant sample in a manner similar to procedures outlined in Study 1. The study invitation was distributed to six elementary schools and a middle school (District 1), as well as an additional middle school and one high school (District 2). In each school in which a study invitation was distributed, one to 12 staff members expressed interest in participating (mean = 8%, range = 3 – 27% of total staff in each building). Teachers who indicated interest in participation were sent a link to all study forms, provided informed consent, and completed the ACCReS, demographic forms, and the SAEBRS. Parents were not notified of the study as no classroom observations took place. As in Study 1, teachers used a unique code for each child when completing the demographic form and SAEBRS to mask students' name and identity. This allowed all students' deidentified information to be included in analyses. Teachers participants were sent a \$50 gift card for participation in the study.

Statistical Analysis

All analyses were again conducted in R version 3.5.1 using the lme4 package (Bates et al., 2005). Specifically, multilevel models were fit to account for nesting of students (Level-1) within classrooms (Level-2); again, random intercept only models were conducted due to the small sample size and lack of power. Classroom level variables included in the models were teachers' years of experience and school level. Student level variables were student race, student disability status, and student EL status. Separate models were again run with and without using

ACCReS to determine the extent to which ACCRES scores improved prediction of SAEBRS scores. Each model was specific to one of the four SAEBRS scores, which served as dependent variables.

Results

Results are summarized in Table 3. The average score on the ACCReS was 158.60 ($SD = 17.73$, range = 116 - 189). Reliability estimates indicated excellent internal consistency for total ACCReS score ($\omega_h = .95$) and the ECP subscale ($\omega_h = .91$) and good internal consistency for the AIS ($\omega_h = .86$), and CCC ($\omega_h = .84$) subscales. For models predicting Academic Behavior, Emotional Behavior, and Total Behavior model fit did not improve when ACCReS score was added to the models. ACCReS score did not significantly predict teachers' ratings on the Academic, Emotional, or Total Behavior SAEBRS scales. However, across all models, students identified as having a disability were significantly more likely to be considered at risk on the Academic Behavior ($p < 0.001$), Emotional Behavior ($p < 0.001$), and Total Behavior ($p < 0.001$) subscales.

In comparison to the model predicting Social Behavior without ACCReS score ($AIC = 3563.5$), including ACCReS score improved the fit of the model predicting Social Behavior ($AIC = 3560.3$, $p < 0.01$). Higher self-ratings on the ACCReS, indicating greater agreement with items related to culturally and contextually relevant supports, predicted higher ratings of students on the SAEBRS Social Behavior subscale, indicating lower perceptions of student risk ($p = 0.027$). Additional significant predictors of higher risk in the first model were identifying students as Black ($p = 0.011$) and identifying students as having a disability ($p < 0.001$). The ICCs for all four outcome variables fell within limits that have previously been considered acceptable for applying MLM for SAEBRS screening data (see ICC values in Table 3; McLean et al., 2019).

General Discussion

In a MTSS framework, educators might review ODR and universal screening data to identify students at risk and determine who will access school-based behavioral interventions (e.g., Tier 2 support; Sugai & Horner, 2009). Yet these data sources rely on teachers' perceptions which have the potential to be biased, impacting Black youth with and without disabilities in particular (Gage et al., 2019). Promoting teachers' cultural responsiveness may promote more equity in an MTSS framework, but there has been little research addressing this plausible connection. The purpose of this study was to investigate preliminary evidence of a relationship between teachers' perceptions of their cultural responsiveness and students' risk, as well as observations of students' classroom behavior.

In Study 1, higher ACCReS scores, which indicates higher teacher perceptions of their cultural responsiveness, did not predict higher academic engagement, but was predictive of lower classwide disruptive behavior. In other words, there was less disruptive behavior observed in the classrooms of teachers who perceived themselves as more culturally responsive. This finding was consistent with previous research connecting teachers' culturally responsive practices with decreased behavioral challenges in the classroom (Larson et al., 2018). It may be that there is less disruption to learning in classrooms in which teachers strive to personally greet all students daily, be consistent and fair when it comes to discipline, understand that behavior may be context-specific, learn about students' families (e.g., customs, languages spoken, cultural traditions), ask families to help define classroom expectations, and review data reflective of the equity of disciplinary actions (all actions reflected in items on the ACCReS). It is not clear why higher ACCReS score did not predict higher academic engagement. It is possible that although the ACCReS is comprehensive in scope, it may lack a specific focus on high-engagement

teaching practices and curriculum development. This is a possible area to explore in future research, perhaps with tools that target instructional practices more intensively.

In Study 2, higher ACCReS scores were not associated with lower perceptions of student risk as indicated by the Academic Behavior, Emotional Behavior, or Total Behavior score, but was associated with lower risk on the Social Behavior subscale of the SAEBRS. In other words, teachers who perceived themselves as more culturally responsive perceived fewer social challenges (e.g., disruptive behavior, arguing, outbursts) among their students. Again, this finding is aligned with prior research highlighting the positive impacts of culturally responsive practice on student behavior (Larson et al., 2018). Also, in light of findings from Study 1, teachers with higher ACCReS scores may have reported lower levels of risk on the Social Behavior subscale of the SAEBRS as their students were typically less disruptive, yet additional research is needed to explore this possibility. In addition, it is not clear why higher ACCReS score did not predict lower risk on the Academic and Emotional Behavior subscales. It is logical that there may not be an observed relationship between ACCReS score and risk on the Academic Behavior subscale for reasons similar to that which was hypothesized in Study 1. The ACCReS is relatively comprehensive in scope but is not necessarily focused specifically on instructional practice and the curriculum, which may have more of an impact on academic risk. Similarly, as the ACCReS is broadly focused on enhancing the classroom environment, there may be limited impact on students' internalizing concerns. This could be why lower ratings on Emotional Risk items (e.g., worry, withdrawal) did not appear to have a relationship with higher ACCReS scores.

Results from analyses also indicated that student disability status predicted risk across all domains of the SAEBRS. It is unclear if students with disabilities actually demonstrated

increased risk in all areas, or if teachers' perceptions of risk are informed by their knowledge of students' disability status. Also, race, specifically being identified as Black, was predictive of higher risk on the Social Behavior subscale of the SAEBRS. This finding is aligned with results from previous research (e.g., Izumi, 2020) and evidences the inequities in who is identified as needing support, particularly for behavioral intervention.

It is promising that higher ACCReS scores predicted higher scores (and thus reduced risk) on the SAEBRS Social Behavior scale for all students screened. However, if Black students are still being perceived as being at greater social risk, this finding requires explicit attention in subsequent research. It may also be important to convey this relationship to staff in the context of professional development to encourage critical reflection related to biases and the influence of such bias in perceptions of students' behavior.

Limitations and Implications for Future Research

There are several limitations to the current study. First, systematic direct observation of students' classwide behavior in Study 1 occurred over three 30-min observations but may still not have been representative of classroom behavior due to the presence of observers.

Anecdotally, students appeared to acclimate quickly to the presence of data collectors as it was common for outside personnel (e.g., student teachers, school support personnel) to observe in the classroom in the schools in which the studies took place. However, future research might incorporate additional classroom observations to ensure data collected are representative.

Furthermore, classwide observations (group instead of individual estimates of student behavior) precluded an analysis of possible relationships between ACCReS score, student race, and individual student behavior. In addition, analysis of cross-level interactions between student race and ACCReS scores on teacher's perceptions of student risk would have been illuminating, but

the small sample size in the current study precluded examination of random slope variance.

Future research should consider if ACCReS score moderates relationships between student race and behavior.

Second, teachers' responses on the ACCReS may have been influenced by social desirability bias. However, teachers were encouraged to respond authentically to ACCReS items and were told scores would not be shared anyone outside of the research team (e.g., administrators). It appears teachers did not view participation in the study as evaluative and responses evidenced a range of total scores on the measure, limiting concern for social desirability bias. Relatedly, observed implementation of ACCReS items were not included due to the research questions explored in Studies 1 and 2. However, future studies might include data from observations of teachers' practice to explore if higher observed scores predict better classwide behavior and lower perceptions of student risk. Also, as described earlier in the Discussion, teachers' perceptions have the potential to be biased. As such, it is important to note that completion of the ACCReS and SAEBRS relied on teachers' perceptions. Therefore, although one of the purposes of this research was to explore the relationship between teachers' practices and students' risk, additional research with multiple and/or objective sources of data are needed to investigate this relationship more fully. Finally, future research might incorporate a larger sample with representation of communities outside of the Northeast U.S.

Implications for Practice

In addition to the implications for research described above, there are implications for school-based practice. First, as data collected from the ACCReS involves self-assessment, this may offer educators an opportunity to reflect in a manner that does not seem evaluative. Data produced from the ACCReS can subsequently guide administrators' action without requiring

intensive coordination. Also, as these preliminary results indicate ACCReS scores may be associated with improved student behavior, professional development aimed at teachers' equitable classroom practices, consideration of culture and context, and access to information and support may subsequently benefit students. Coaching teachers to incorporate the practices embedded within the ACCReS (e.g., greet students daily, collaborate with families to define classroom expectations, incorporate students' culture in instructional material and examples) may positively impact the classroom environment. As teachers perceive their practice to be more culturally responsive, there could perhaps be changes to who teachers refer to the office and deem at social and behavioral risk. This could ultimately lead to more equitable access to school behavioral health supports, and perhaps ultimately less racial disproportionality in discipline, special education decisions and restrictive placements.

Implications for Embedding Equity into School Mental Health

Implementing equitable, comprehensive, and culturally responsive school-based behavioral health services hinges on robust preventative and proactive supports for students and teachers (Cowan et al., 2013). As indicated in Study 1, attention to teachers' culturally responsive practice may be an important component in preventing behavioral challenges as well as disproportionate disciplinary action. For students who continue to struggle with social, emotional, behavioral, and mental health challenges, despite high-quality and culturally responsive Tier 1 supports, fair and unbiased identification and referral processes are crucial for breaking down 'gatekeeping' and expanding appropriate access to services. The current study highlights that critical reflection is needed regarding the potential role of culture and bias in teachers' perceptions of student risk. Teacher self-assessment may be a valuable tool for building equitable and culturally responsive systems within schools to weaken referral pathways

for disciplinary action and restrictive placements while strengthening those that lead to expanded access to high-quality, integrated, and comprehensive behavioral health services.

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Table 1*Teacher and Student Demographic Data for Participants in Study 1 and Study 2*

	Demographic Characteristics			
	Study 1		Study 2	
	%	<i>n</i>	%	<i>n</i>
Teacher Participants				
Gender				
Female	90.0	18	86.7	26
Male	10.0	2	13.3	4
Race/Ethnicity				
White	85.0	17	86.7	26
Black or African American	0.0	0	3.3	1
Latinx	5.0	1	0	0
Asian	5.0	1	3.3	1
Multiracial	5.0	1	6.7	2
Highest Degree Earned				
Bachelor's	10.0	2	6.7	2
Masters	70.0	14	56.7	17
Masters +	20.0	4	36.7	11
Certification Type				
General education certification	75.0	15	66.7	20
Special education certification	5.0	1	6.7	2
Both	20.0	4	26.7	8
Years of Teaching Experience				
< 1 Year	0	0	0	0
1-5 Years	5.0	1	3.3	1
6-10 Years	30.0	6	40.0	12
≥ 11 Years	65.0	13	56.7	17
Grades Taught				
Elementary (K – 5 th grade)	60.0	12	40.0	12
Secondary (6 th – 8 th grade)	20.0	4	50.0	15
High School (9 th – 12 th grade)	20.0	4	10.0	3
Student Participants				
Identified with Disability	17.0	77	26.2	163
English Learner	29.1	132	25.6	159
Racial and Ethnic Minoritized Youth	73.3	333	73.6	458
Race/Ethnicity				
Race				
Black	21.8	99	28.0	174
Latinx	28.6	130	22.3	139
Other or Multiple Races/Ethnicities	22.9	104	23.3	145
White	26.7	121	26.4	164

Table 2*Multilevel Regression Analysis Predicting Classwide Academic Engagement and Disruptive Behavior*

	Academic Engagement			Disruptive Behavior		
	Coefficient	SE	<i>p</i>	Coefficient	SE	<i>p</i>
Fixed Effects						
Level 2 Variables						
ACCRoS Score	0.0003	0.0016	0.852	-0.0026	0.0008	0.002**
Teacher Experience	0.0031	0.0025	0.206	-0.0019	0.0013	0.153
School Level						
Secondary	0.0121	0.0650	0.853	0.0663	0.0341	0.052
Percentage of EL Students	0.1191	0.0834	0.153	0.0616	0.0438	0.159
Percentage of Students with a Disability	-0.0397	0.0689	0.565	0.0237	0.0362	0.513
Percentage of REM Students	-0.0995	0.1267	0.432	0.0568	0.0665	0.393
Level 1 Variable						
Observation Number						
Time 2	0.0079	0.0204	0.699	-0.0283	0.0157	0.071
Time 3	0.0138	0.0204	0.499	-0.0184	0.0157	0.240
Random Effects						
Teacher		0.0033			0.0005	
Residuals		0.0039			0.0023	
ICC: Teacher		0.46			0.18	

Note. 60 observations of 20 classrooms. ACCReS = Assessment of Culturally and Contextually Relevant Supports; EL = English learner; REM = racially and ethnically minoritized; ICC = intra-class correlation coefficients. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3*Multilevel Regression Analysis Predicting Social, Academic, and Emotional Behavior Risk Screener (SAEBRS) Ratings*

	Subscale									Total Behavior		
	Social Behavior			Academic Behavior			Emotional Behavior					
	Coefficient	SE	<i>p</i>	Coefficient	SE	<i>p</i>	Coefficient	SE	<i>p</i>	Coefficient	SE	<i>p</i>
Fixed Effects												
Level 2 Variables												
ACCRoS Score	0.039	0.016	0.016*	0.016	0.016	0.315	0.012	0.022	0.582	0.042	0.049	0.388
Teacher Years of Experience	0.017	0.045	0.710	-0.024	0.044	0.592	-0.023	0.061	0.675	-0.078	0.36	0.567
School Level												
Secondary	0.060	0.592	0.918	0.112	0.577	0.846	-1.239	0.777	0.111	-0.962	1.782	0.589
Level 1 Variables												
Student Race												
Black	-1.315	0.500	0.009*	-0.124	0.511	0.808	0.609	0.432	0.158	0.276	1.322	0.835
Latinx	-0.753	0.535	0.159	-0.390	0.548	0.476	0.478	0.455	0.294	-0.313	1.405	0.824
Other	-0.852	0.524	0.104	0.231	0.537	0.668	0.0758	0.444	0.865	0.564	1.375	0.681
Student EL Status	0.149	0.478	0.754	-0.037	0.049	0.939	0.378	0.427	0.376	0.327	1.281	0.798
Student Disability Status	-1.872	0.449	<0.001***	-2.055	0.456	<0.001***	-1.811	0.407	<0.001***	-6.081	1.209	<0.001***
Random Effects												
Teacher	1.487			1.316			3.525			15.563		
Residuals	16.452			17.373			11.540			112.096		
ICC: Teacher	0.08			0.07			0.23			0.12		

Note. Analysis included 622 observations and 30 teachers. ACCReS = Assessment of Culturally and Contextually Relevant Supports; EL = English learner; ICC = intra-class correlation coefficients. **p* < .05. ***p* < .01. ****p* < .001.