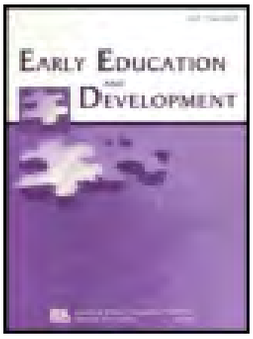

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Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in Early Childhood Classrooms

Stephanie M. Curenton [a], Iheoma U. Iruka[b], Marisha Humphries[c], Bryant Jensen[d], Tonia Durden[e], Shana E. Rochester[a], Jacqueline Sims[a], Jessica V. Whittaker[f], and Mable B. Kinzie[g]

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ABSTRACT

Research Findings: The purpose of this study was to refine and validate the Assessing Classroom Sociocultural Equity Scale (ACSES), an observation tool for measuring equitable sociocultural interactions in early childhood classrooms (pre-K to Grade 3) with racially minoritized learners (RMLs). Preliminary psychometric information from 142 observations across 52 teachers (average of 2 videos per teacher) provided internal consistency and validity information. Our analyses resulted in a significant and highly reliable 5-factor solution comprising 33 items. These five factors are: *Challenging Status Quo Knowledge, Equitable Learning Opportunities for RMLs, Equitable Discipline, Connections to Home Life*, and *Personalized Learning Opportunities*. Concurrent and divergent validity between ACSES and the Classroom Assessment Scoring System (CLASS) indicated these factors are associated with distinct aspects of classroom interactions. Lastly, correlations between teacher socio-demographic (age and race/ethnicity) and professional (years teaching, education, and major) characteristics and ACSES factor scores were considered. *Practice or Policy*: Results are discussed in relation to research contributions of the measure as well as pre-service education and in-service professional development for teachers.

Schools have consistently failed to provide racially minoritized learners (RMLs) with an equitable and high-quality education, and this problem spans from the college level (Stewart, 2013), to K-12 (Crosnoe & Turley, 2011; Robinson, 2010), and even to early childhood (Han, 2008; Wright, 2011). According to Stewart (2013), racially minoritized students include Black, Latinx,[1] Asian/Pacific Islanders, and Native Americans. Informed by the work of Benitez (2010), who is credited with defining the term *minoritized*, we use the term to refer to the United States' active and intentional process of using geographic markers (e.g., nationality) and/or phenotypic characteristics to socially construct biologically artificial racial categories that have formed the basis of our country's caste system.

The disparities in education equity and quality between White children and RMLs are evident in academic engagement and achievement, as well as in higher discipline referral rates and harsher severity. For instance, the education outcomes of RMLs, on average, are consistently worse compared to the outcomes of their White peers (Burchinal, McCartney, et al., 2011; Humphries & Iruka, 2017; McKown & Weinstein, 2008; Miranda, Webb, Brigman, & Peluso, 2007; Musu-Gillette et al.,

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2017) and this is exasperated by family socioeconomic (Magnuson & Duncan, 2006) and immigration status (Fry, 2008; Warikoo & Carter, 2009; Yoshikawa & Kholoptseva, 2013). Even though, on average, some Asian and Pacific Islander students perform well in school, particularly during the early childhood years (Han, 2008), many still struggle throughout K-12 and eventually drop out at high school (Faircloth & Tippeconnic, 2010). Thus, a consistent body of research, spanning across all education levels, illustrates that RML children face educational challenges that their White counterparts do not. Although there are many complex and diverse factors undergirding RMLs' lower academic performance and social-emotional outcomes, the scope of this paper is to examine a less-studied classroom dynamic: inequitable teaching practices that fail to acknowledge RMLs' sociocultural circumstances and inequalities in the classroom.

The purpose of this study is to operationalize inequitable classroom interactions by examining the psychometric properties of a classroom observation tool that examines equitable aspects of teachers' classroom interactions with racially minoritized learners. The tool is framed within the context of a teacher's classroom interactions with young RMLs, grades pre-Kindergarten to third (pre-K to Grade 3), and is designed for use in both heterogeneous and homogenous educational settings where RMLs are present. Our aim is to provide validity information about the Assessing Classroom Sociocultural Equity Scale (ACSES), namely information about internal consistency and concurrent and divergent validity.

Importance of Classroom Interactions for RML Children

Classroom interactions are daily classroom exchanges regarding instructional, social, and emotional content (Hamre et al., 2012). Classroom interactions are a way in which educators can narrow the achievement gap experienced by RML children (Jensen, Grajeda, & Haertel, 2018). Improvements in classroom interactions can create positive learning environments for historically disenfranchised and underperforming children. However, there are less-studied classroom interaction dynamics compromising teacher–child interactions specifically with RML children that need to be examined. They include interactional practices that support or deter racially minoritized learners' academic and social-emotional outcomes, such as inequitable learning opportunities and discipline as well as teachers' use of culturally responsive pedagogy.

The need for focused attention on RML children is based on research showing that these learners are perceived and treated inferiorly to White children, which results in inequitable treatment in the classroom. For example, research is clear that teachers' evaluations of students remain susceptible to racial stereotypes that disadvantage Black and Latinx students (McGrady & Reynolds, 2013), and teachers underestimate the cognitive abilities of Black, Latinx, and Native Americans (Ready & Wright, 2011). Some teachers have low academic and behavioral expectations of Black (Ferguson, 1998) and Latinx (Tenenbaum & Ruck, 2007) children, and these findings are important given that other studies report teachers to provide higher quality instruction to students for whom they have high expectations (McKown & Weinstein, 2008). Tenenbaum and Ruck (2007) found that teachers behave less favorably toward Latinx students and are less likely to praise them even when Latinx children provide correct answers. Another study found that teachers reported young Black children as being less socially competent; however, trained blind observers rated these same children as exhibiting positive social behaviors (Humphries, Keenan, & Wakschlag, 2012). A study by Gilliam et al. (2016) found that the behaviors of Black children were more likely to be viewed negatively and harshly by teachers. Similarly, Goff and colleagues found that Black boys were more likely to be viewed as being older than they were and more likely to be viewed as guilty of a crime than White children (Goff, Jackson, Di Leone, Culotta, & Di Tomasso, 2014). Epstein, Blake, and González (2017) found that adults viewed Black girls as more "adult-like" (e.g., adultification) and less innocent than their White peers starting as early as the age of five, and thus these adults viewed Black girls as needing less nurturing, support, comfort, and protection than White girls of the same age.

In addition, RMLs face a myriad of challenges that may be hindering their performance in school, such as being taught by underprepared teachers (Borman & Kimball, 2005; Darling-Hammond, 2004), discontinuities between home and school culture (Galindo & Fuller, 2010), and inequitable discipline (Gilliam, 2005; Skiba et al., 2011; Skiba, Michael, Nardo, & Peterson, 2002). Several researchers contend that Black and Latinx children's lowered academic achievement is due to their lack of access to quality educational resources and experiences (Conchas, 2001; Darling-Hammond, 1998; Hill & Torres, 2010; Humphries & Iruka, 2017; Magnuson & Duncan, 2006). Thus, there is a need to attend to RML children's sociocultural experiences in education and avenues to ensure equitable learning opportunities.

In order to begin to change the educational experiences of RML children who have been disproportionately impacted by educational and cultural inequities, there is a need for reliable and valid measures of sociocultural interactions to better facilitate RMLs' academic, social, and emotional positive development. Presently, the early childhood field has observation tools to measure classroom interactions, but they do not directly address the range of ways in which interactions between teachers and students, or among students themselves, are equitable, anti-biased, or culturally responsive. The Assessing Classroom Sociocultural Equity Scale (ACSES) allows for the examination of sociocultural interactions that influence the educational experiences of young racially minoritized learners.

Classroom Observation Measures and Child Outcomes

There are two widely used existing classroom observation measures in the early childhood field, the Classroom Assessment Scoring System (CLASS; Pianta, La Paro, & Hamre, 2008) and the Early Childhood Environment Rating Scale-Revised (ECERS-R; Harms, Clifford, & Cryer, 1998). These measures differ in terms of the various classroom dimensions and interactions assessed, and their emphasis on global aspects of structural and process quality. The CLASS focuses on process quality and has three domains: Emotional Support, Classroom Organization, and Instructional Support, which include 10 dimensions. The ECERS-R focuses on defining quality as it relates to developmentally appropriate practices in terms of care routines, program structure, space, and interactions. The ECERS-R contains items assessing the presence of photos and books featuring racial/ethnic or ability diversity in the classroom, but these items do not explicitly consider equity or anti-bias instruction. Likewise, CLASS makes no mention of considering children's race/ethnicity or language status when evaluating classroom process quality.

The effects of classroom process quality on children's educational outcomes, although significant, are small to moderate for all children, regardless of their ethnicity (Keys et al., 2013; Mashburn et al., 2008). In a study of 325 early childhood classrooms, modest associations were found between CLASS scores and academic growth; specifically, the sample of 4-year-old African American and Latinx children had modest growth in literacy, language and working memory (Hamre, Hatfield, Pianta, & Jamil, 2014). Likewise, research found the ECERS-R was related to positive growth in children's expressive language (Mashburn et al., 2008). Findings have been inconsistent, however, when the sample comprises mainly RMLs. López (2011), for example, found that CLASS dimensions significantly predicted achievement gains for White students, but not for Latinx students, in a Midwest elementary school. She argued that CLASS markers favored some ethnic groups over others, and that CLASS constructs were not generalizable for Latinx children. Other work (e.g., Downer et al., 2012), however, finds significant and meaningful predictive validity of CLASS constructs for Latinx and English language learner students. Thus, CLASS and ECERS-R may not appropriately address all educational research questions (Burchinal, Kainz, & Cai, 2011; Keys et al., 2013) related to facilitating the educational opportunities of racially minoritized learners.

Despite the strengths of the CLASS and ECERS-R, neither assesses sociocultural factors, like culturally responsive pedagogy, teacher bias/differential treatment, or inequitable experiences. Yet, teachers bring many elements to the practice of teaching that influence the quality of their

instruction, including personal attitudes, biases, and even stereotypes. It is imperative to assess such factors when classrooms contain children who are racially and ethnically diverse because teachers can influence the quality and effectiveness of instruction for RMLs specifically (Jensen & García, in press; Sandilos, DiPerna & The Family Life Project Key Investigators, 2014). Effective global process quality may be insufficient to improve the educational opportunities, experiences, and outcomes of RMLs given the history of oppression and discrimination facing their ethnic/racial groups. Instead, it may be that RMLs need to be exposed to high-quality education that is *also* culturally responsive and equitable (Humphries & Iruka, 2017). If this is true, then the field needs an observation measure that can complement previous measures while also tapping into those sociocultural constructs that are particularly relevant when educating racially minoritized learners. Thus, ACSES may be complementary to CLASS and ECERS-R because it may provide the ability to distinguish between global aspects of teaching practice (Gitomer et al., 2014) versus equity-informed, culturally relevant, and anti-bias approaches to teaching.

Measuring Equitable Sociocultural Interactions in the Classroom

To our knowledge, there is no reliable and valid measure of equitable sociocultural interactions in early childhood classrooms that has been developed and used across a wide range of RMLs and that focuses specifically on anti-bias and equitable teaching practices. A similar measure, the Classroom Assessment of Sociocultural Interactions (CASI), was designed to measure cultural dimensions of classroom interactions in fourth- and fifth-grade settings in US schools where Black and Latinx children were the majority (Jensen et al., 2018).

CASI and ACSES have similarities, but there are important distinctions between the two. First, although CASI has been used in Mexican early childhood kindergarten and first-grade classrooms (Jensen et al., 2018; Jensen, Mejia-Arauz, & Aguilar, 2017), an early childhood version of CASI has never been examined or tested with racially minoritized children living within the United States. Second, the framing for CASI is based on "cultural aspects of teacher–child interactions," such as examining classroom practices that support learning by observing and pitching in, making use of connections between instructional content and children's cultural upbringing, and developing a sense of communalism in K-5 formalized school age classrooms (Jensen et al., 2019). Third, CASI and ACSES also differ in terms of scoring. Both are scored at the indicator level, but CASI indicators are presented as a rubric with differing definitions at each scoring increment, whereas ACSES indicators are presented as discrete behaviors/speech acts that are scored along a continuum measuring the frequency of the behavior and the portion of children affected by the behavior. Lastly, CASI and ACSES differ in terms of the diversity of the RMLs used for development of the early childhood version. The early elementary school version of CASI (grades K-1) was developed with a Mexican population living in Mexico, whereas ACSES was developed based on interactions from early childhood classrooms in the Midwest and Southeast of the United States and with classrooms of children that included Whites, Blacks/African Americans, Latinx, Asians, and Multiracial children.

ACSES is a measure of *equitable sociocultural interactions* in early childhood (pre-K to Grade 3) classroom environments (Curenton et al., 2018) that is based on the pedagogical foundation of culturally relevant education (Ladson-Billings, 1995), culturally responsive education (Gay, 2000), and anti-bias education (Derman-Sparks & Edwards, 2010), within a culturally relevant anti-bias framework (Iruka, Curenton, & Eke, 2014). It is based on a culturally relevant, anti-bias framework that contends teaching should incorporate the cultural knowledge, experiences, and learning and communication styles of children from diverse racial, ethnic, and linguistic backgrounds (Curenton & Iruka, 2013), and that classroom interactions should reduce bias, facilitate cultural sensitivity and familiarity, and create an environment that ensures opportunities for all children to meet their potential. Within this framework, we operationalize *equitable sociocultural interactions* as bidirectional interactions between teachers and children and among peers that support: 1) freedom of

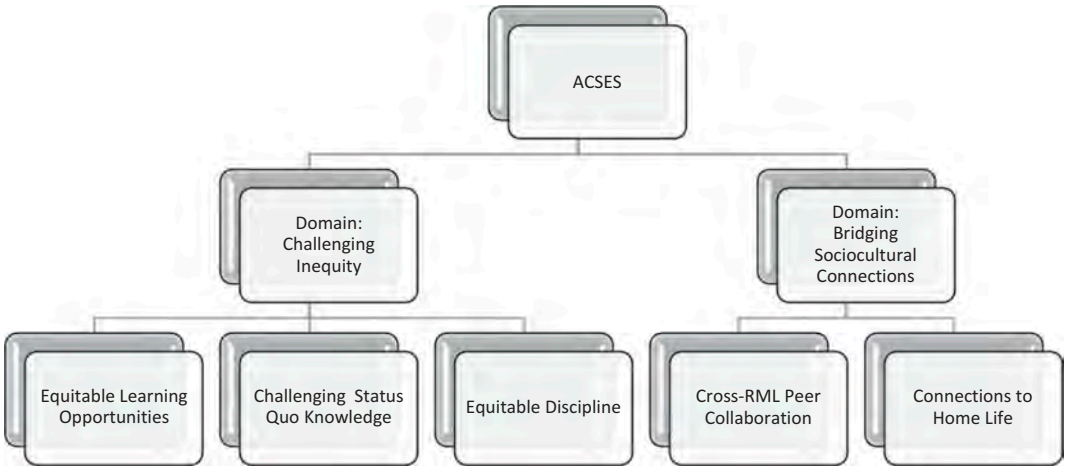

Figure 1. Theoretical ACSES domains and dimensions.

expression, 2) connection and incorporation of children's home life into the classroom, 3) social identities in the classroom, 4) social justice, 5) equitable and positive discipline, 6) instruction and curriculum that is both intellectually challenging and challenges the status quo, and 7) that incorporates children's ethnic and sociopolitical heritage in the classroom. Equitable sociocultural interactions incorporate student voice and experiences into the classroom and challenge the status quo and social hierarchy.

ACSES is organized into two instructional domains and five dimensions (see Figure 1). The domains Challenging Inequity and Bridging Sociocultural Connections capture teachers' and children's observable actions in the classroom. Within the Challenging Inequity domain, the three dimensions are Equitable Learning Opportunities (ELO), Challenging Status Quo Knowledge (CSQK), and Equitable Discipline (ED). Behavior markers for ELO include encouraging and allowing for racially minoritized learners' participation; and behavior markers in CSQK include asking children to share their opinions and ideas; markers in ED indicate the discipline strategies teachers are using, such asisolation or verbal reprimands. The Bridging Sociocultural Connections domain is composed of the Cross-RML Peer Collaboration (CPC) and Connections to Home Life (CHL) dimensions. Behavioral markers for CPC consider the interactions between RML and White learners in the classroom, and CHL measures behaviors by the teacher to link home life and language to school life and language.

Present Study

This study investigates the psychometric properties of ACSES by (1) examining the descriptive characteristics and distribution of ACSES items and dimensions, (2) determining the factor structure of ACSES and its internal consistency, (3) establishing concurrent and divergent validity between ACSES factors and CLASS domains and dimensions, and (4) examining correlations among ACSES factors and teacher characteristics. Due to the novelty of this measure and the exploratory nature of this work, no a priori hypotheses guided the investigation.

Method

Secondary Data Source

We conducted a secondary analysis of video recorded data from the efficacy trial of the My Teaching Partner-Mathematics/Science (MTP-M/S) project (Whittaker et al., 2019). The goal of MTP-M/S was to

help develop young children's math and science knowledge and skills, especially for young children at-risk for school failure, through the provision of high-quality math and science curricula and implementation support to teachers (Kinzie, Whittaker, McGuire, Lee, & Kilday, 2015). Curricular activities were designed to provide multi-sensory, teacher-guided explorations of mathematics and science in everyday surroundings, emphasize student inquiry, anchor explorations in a collection of children's literature in mathematics and science, and extend learning throughout the day.

Participants in the MTP-M/S study were recruited from two sites from large urban areas, one in the Midwest and one in the Southeast. The two sites were not chosen randomly, but instead chosen based on discussions with division/district administrators who were willing to 1) have their pre-K teachers implement new math and science curricula and participate in the associated professional development, and 2) have consenting teachers be randomized to the intervention or a business-as-usual condition. Teachers from both sites participated for two years with two consecutive cohorts of children. Site 1 teachers participated from 2013 to 2015, and were in a variety of settings including public, private, and Head Start classrooms. Site 2 teachers participated from 2014 to 2016 and were all in public pre-K classrooms. Teachers were eligible to participate if they had access to an Internet-connected computer and had at least 12 children enrolled, of whom 75% or more were eligible for kindergarten the following year, were English speakers, and were typically-developing (excluding speech delays). This resulted in 140 teachers and classrooms that met eligibility requirements, were recruited into the study, and for whom child data were available.

After enrollment, stratified random assignment was used to place teachers in the MTP-M/S treatment or "business-as-usual" control condition. Teachers were stratified by the number of participating teachers per center and type of center (i.e., Head Start, public pre-K, private pre-K). For centers with two or four study classrooms, half were randomly assigned to each condition. For centers with three classrooms, half were randomly selected to have two randomly assigned treatment classrooms and one control classroom, and half were selected to have two randomly assigned controls, and one treatment. Programs with a single classroom were grouped according to center type, and half of each group was randomly assigned to each condition.

Teachers were asked to film all of the mathematics and science lessons they taught each month using digital cameras. Cameras, SD cards, and postage-paid mailers were provided by the project. Teachers recorded four videos per week.

Data for Present Study

For this present study, a random selection of MTP-M/S control condition video recordings were coded. Only control videos were considered in order to ensure that the treatment teachers received during the MTP-M/S intervention did not impact the results for this study. Although math and science videos were the only videos collected in the MTP-M/S intervention, we note that ACSES is intended to measure classroom interactions regardless of the focus of the lesson. Data were shared via a data sharing agreement with the principal investigators of MTP-M/S. The MTP-M/S intervention preceded the developement of the ACSES measure, and the developers of ACSES (Curenton et al., 2018) were not involved in the design or delivery of MTP-M/S. Neither the scope, design, or data collection for the MTP-M/S intervention was related to issues of sociocultural equity, anti-bias instruction, or culturally relevant pedagogy. Thus, the present study examines what sociocultural equitable instruction looks like in "business-as-usual" pre-K classrooms.

Participants

Videos represented teacher instruction across the fall and spring of the 2013–2014 school year across 12 centers. Between one and four teacher observation videos (approximately 15 minutes in length) were selected for which there was also coding with the CLASS, resulting in most teachers being observed multiple times (M = 2.73, SD = 1.03, range 1–4 observations). To be included, the

observations had to depict at least one RML child within the classroom. These criteria resulted in a total of 142 teacher observations across 52 unique teachers.

MTP-M/S collected demographic information about teachers and students. Most of the teachers in these classrooms were female (95%) and were, on average, 39 years old (*SD* = 11.88, range 21– 73). In addition, over two-thirds had a BA degree or higher (60%), while 22% had a two-year degree. Teachers were predominantly White (67%). Twenty-seven percent of teachers identified as Black/African American, while the remaining teachers identified as Latinx (2%), Asian (2%), and Other (2%). Teachers had an average of 4.68 years experience working with children prior to prekindergarten (*SD* = 8.11, range 0 to 38 years). Regarding their classrooms, the average number of children enrolled the first day of school was 16.20 (*SD* = 4.90, range 8–34), the average classroom was comprised of approximately 52% RML students, and the average income-to-needs ratio was 1.94 (*SD* = 1.04, range 0.39 to 3.97). Most non-White children were Black (33%), Latinx (8%), Asian (4%), and Multiracial (10%). The age range for enrolled children was 4- and 5-years-olds.

Measures

Assessing Classroom Sociocultural Equity Scale (ACSES; Curenton et al., 2018)

ACSES was theoretically conceived of as a 71-item classroom observation measure designed to assess equitable sociocultural interactions within early childhood classrooms environments. As briefly outlined previously, ACSES is composed of two domains: Challenging Inequity and Bridging Sociocultural Connections. The Challenging Inequity domain encompasses three dimensions: Equitable Learning Opportunities (ELO), Challenging Status Quo Knowledge (CSQK), and Equitable Discipline (ED), and focuses on how teachers actively navigate issues of inequity. The ELO dimension is composed of 20 items, the CSQK dimension has nine items, and the ED dimension has 13 items. Specific items in these dimensions include, "Non-RML children are given the opportunity to ask/answer questions" and "Teacher has overly strict, rigid expectations for classroom behavior." The Bridging Sociocultural Connections domain is composed of two dimensions: Cross-RML Peer Collaboration (CPC) and Connection to Home Life (CHL), and focuses on how teachers help to foster connections between school and a student's culture, language, interests outside of school. The CPC dimension has 15 items and the CHL has 14 items. Specific items in these dimensions include, "RML and non-RML children share materials and cooperatively take turns" and "Teacher uses instructional materials that represent RML children's home life and community." Scoring for each dimension was based on the frequency of occurrence and how many students it impacted: 1 (*never*) = Did not exhibit, 2 (*hardly ever*) = Exhibited 1 time or with only a few children, 3 (*sometimes*) = Exhibited 2–3 times with some children, 4 (*very often*) = Exhibited often with about half children, but inconsistently, 5 (*nearly always*) = Exhibited consistently with nearly all children. Higher scores indicated more equitable learning opportunities after the necessary items are reverse scored.

Classroom Assessment Scoring System (CLASS; Pianta et al., 2008)

In order to consider concurrent and divergent validity between ACSES and the CLASS, we utilized previously rated scores from the MTP-M/S studies (Vitiello, Whittaker, Mulcahy, Kinzie, & Helferstay, 2019; Whittaker, Kinzie, Williford, & DeCoster, 2016). All 10 CLASS dimensions (Positive Climate; Negative Climate; Teacher Sensitivity; Regard for Student Perspectives; Behavior Management; Productivity; Instructional Learning Formats; Concept Development; Quality of Feedback; Language Modeling) as well as the broader three CLASS domains (Emotional Support; Classroom Organization; Instructional Support) were considered. Dimensions scores are rated on a 7-point scale based on detailed descriptions of low, mid, and high, which are then averaged to create domain scores that still fit within the 1–7 scoring range. Within the MTP-M/S, all videos were double coded and inter-rater reliability analyses for the full sample (both the experimental and control condition) indicated good/moderate agreement (Emotional Support, *ICC* = .726; Classroom

Organization, *ICC* = .709; Instructional Support, *ICC* = .653). See Whittaker et al. (2016) or Vitiello et al. (2019) for more information on the coding of CLASS scores used in the prior MTP-M/S studies. The CLASS has been widely used to assess preschool process quality (LoCasale-Crouch et al., 2007) and has demonstrated positive associations with many child outcomes (Mashburn et al., 2008), including gains in children's achievement (Howes et al., 2008).

Procedures

Training

ACSES coders were trained in groups at two time points, Summer of 2017 (two graduate-level coders) and Spring 2018 (one undergraduate- and two graduate-level coders[2]). Coders were first given the ACSES manual (Curenton et al., 2018) to read ahead of time and then gathered for a two-day in-person training with the first author. During this training, the first author provided a detailed description of each dimension along with examples and then showed 3–4 master-coded (scored by the first author) videos. Seven total master-coded videos were rated by the trained coders, three in the Summer of 2017 and four in Spring 2018. Coders were asked to independently rate the master-coded videos during the training. Any discrepancies between the coders' and the master-coder's ratings were conferenced independently for each master-coded video in order to align the raters with the master coding.

Coding

These trained coders rated the 142 videos, all drawn from the fall and spring of the 2013–2014 school year, at two different time points, during the Summer 2017 (n = 80; Wave 1) and Spring 2018 (n = 62; Wave 2). Our examination of the data across the two waves of coding indicated no substantive differences, so we combined Waves 1 and 2 in our analyses in order to increase our sample size. Each rater coded videos independently after watching the entire video twice (videos were approximately 15 minutes long). For Wave 1, raters coded 1–2 videos each week (N = 9 double coded throughout the coding cycle). For each double coded video, they (1) scored the video independently, (2) met to review instances of disagreement using their qualitative notes for clarification and evidence, and (3) negotiated the rationale for their scoring choices until they reached agreement during conferencing. Coders maintained adjacent agreement (agreement within one point) across all indicators across the five ACSES dimensions: ELO (100%), CSQK (78%), ED (100%), CPC (78%), and CHL (100%). These conferenced scores were used in the factor analysis models. The remaining 71 Wave 1 videos were coded by one coder (sixth author). For Wave 2, the one rater coded all videos independently after she reached 100% agreement for each indicator with the master-coder during the training.

In order to establish inter-rater reliability, the individual scores for the double-coded videos were fit onto two-way mixed-effects intraclass correlations (ICC) models. Such ICC models reflect both the degree of correlations and agreement between raters scores (Koo & Li, 2016). ICCs were calculated for each rater's individual scores at the behavior indicator level across the five dimensions. Higher ICC scores (range = 0–1.0) indicate greater inter-rater reliability, and the scores for the dimensions were excellent (range .75 to 1.00; Cicchetti, 1994): Equitable Learning Opportunities, ICC = .915; Challenging Status Quo Knowledge, ICC = .720; Equitable Discipline, ICC = .849; Cross-RML Peer Collaborations ICC = .928; Connection to Home Life, ICC = .605. It is important to note that the ICC for Connections to Home Life Dimension was good (Cicchetti, 1994).

Data Analyses

Four main sets of analyses were conducted in Stata MP 15.1: (1) descriptive analyses at the item and dimension levels to examine patterns of missingness, skewness, and range, (2) exploratory factor analysis to test the structure of the scale, (3) correlations between ACSES factors and CLASS

domains and dimensions to probe concurrent and divergent validity, and (4) correlations between ACSES factors and teacher characteristics.

Results

Preliminary Analyses

Item-level frequencies were first examined to determine the distribution of observer ratings on each of the 71 items in the ACSES observation measure. These descriptive analyses revealed high rates of systematic missingness on select items from the Equitable Learning Opportunities (4 items), Equitable Discipline (4 items), Cross-RML Peer Collaboration (all 15 items), and Connection to Home Life (6 items) dimensions. Specifically, 11 classrooms were missing all items that referenced non-RML students because the classrooms had all RML students (and no non-RML students); these eight items (four drawn from the ELO dimension and four drawn from the ED dimension) were excluded from the present analyses given their high rate of systematic missingness.

These same 11 classrooms were also missing all items on the Cross-RML Peer Collaboration dimension (15 items). Items for CPC were operationalized as interactions between RML and White children. Given the absence of non-RML (White) students in some videos, and therefore the inability to rate peer interactions between White students and RMLs, the 15 items from CPC were considered in a supplementary subscale for the 41 classrooms in which such interactions occurred across RML and non-RML (White) students. In order to determine the internal consistency of the CPC as a supplemental dimension in those classrooms with both RML and non-RML students, we calculated Cronbach's alpha on the 41 classrooms with valid CPC data. The CPC dimension had an alpha of .73. This supplemental scale is presented in the Appendix.

Further consideration revealed that 31 English-only classrooms were missing all items that referenced the use of other languages and/or dialects (by teachers or students) in the classroom. These six items (drawn from the CHL dimension) were thus excluded from the present analyses.

Of the remaining 42 complete items concerned with RML students and with general practices in the classroom, there were three strongly skewed items. One of these items was drawn from the Challenging Status Quo Knowledge dimension and two were drawn from the Connection to Home Life dimension. Specifically, their distributions were concentrated in one value for 85% or more of the cases, and thus, these three items were removed from subsequent analyses. Table 1 reports descriptive statistics for the remaining 39 items considered in the exploratory factor analysis.

Reliability and Validity

Exploratory Factor Analysis

An exploratory factor analysis (EFA) of the remaining 39 items was conducted. Given that all items measure aspects of sociocultural interactions in early childhood classrooms, we used an oblique rotation. The Kaiser-Meyer-Olkin measure of sampling adequacy was .52, above the commonly recommended value of .50 (Hutcheson & Sofroniou, 1999), and Bartlett's test of sphericity was significant ($\chi2$ (528) = 1427.62, $p < .001$). Though the ACSES measure was initially designed with five dimensions, we did not make assumptions about how many factors would emerge in this exploratory analysis. We required that an item has at least a .40 (positive or negative) factor loading in order to be categorized in a specific factor. With these criteria, we retained five factors with conceptual coherence, eigenvalues above 1, and adequate numbers of items. These five factors explained 60.34% of the total variance. The Cronbach's alphas of the resulting five factors, ranging from .74 to .90, suggest a strong internal consistency. We note that six of the 39 items failed to load onto any of the factors and were thus excluded from remaining analyses (three items from ELO, two items from CSQK, and one item from CHL). Table 1 still presents these items for descriptive purposes, but denotes these six excluded items with asterisks.

Table 1. Descriptives of ACSES items considered in exploratory factor analysis.

ACSES Items	Mean	*SD*	Min	Max	Skewness
ELO: RML children are given the opportunity to ask/answer questions	3.65	0.90	1.00	5.00	−0.677
ELO: RML child(ren) participate by raising hand and responding to questions	3.79	0.98	1.00	5.00	−1.445
ELO: RML child(ren) are fully integrated into activities and engaged	4.37	0.91	1.00	5.00	−2.174
ELO: RML child(ren) are actively engaged and on-task	4.22	0.87	1.00	5.00	−2.109
ELO: Teacher makes sustained eye contact and shows general interest to affirm RML child(ren)	3.38	1.04	1.00	5.00	−0.364
ELO: Teacher listens and responds to RML child(ren)'s questions/comments	3.30	1.03	1.00	5.00	−0.408
ELO: Teacher affirms RML child(ren)'s questions and encourages them to think more deeply	2.27	1.21	1.00	4.75	0.471
ELO: Each child is given the opportunity to handle materials/objects	3.29	1.30	1.00	5.00	−0.166
ELO: Teacher incorporates children's comments and reconnects them to lessons	3.00	0.96	1.00	5.00	0.104
ELO: Teacher challenges/scaffolds children according to their abilities	3.15	0.95	1.50	5.00	0.205
ELO: Teacher provides instructional content across a range of auditory, visual, and movement opportunities	3.90	0.87	1.75	5.00	−0.343
ELO: Teacher waits for children to respond if they need more time formulating their verbal response	3.11	0.91	0.50	4.75	−0.844
*ELO: Teacher proactively praises children positive, on-task behavior (e.g., "I like the way John is raising his hand")	2.16	1.15	1.00	5.00	0.679
*ELO: Teacher uses non-verbal cues to redirect and bring them back on task (e.g., three claps when children should be quiet)	1.61	0.69	0.75	3.75	1.068
ELO: Teacher uses positive collective discipline to redirect children (e.g., "everyone's eyes should be up here")	2.27	0.85	1.00	4.00	0.019
*ELO: Teacher verbally expresses the behavior expectations for positive on-task behavior (e.g., we are sharing the materials. Please pass after you have had a turn.)	2.05	0.86	1.00	4.50	0.723
CSQK: Teacher presents topics and materials that show RML(s) in positions of authority and having agency	1.22	0.46	0.75	2.75	2.032
CSQK: Teacher provides children with open-ended, non-scripted activities that allow for creativity	1.88	0.93	1.00	4.75	1.253
*CSQK: Teacher encourages children to question social, scientific, and historical facts	1.13	0.33	0.75	2.50	2.437
*CSQK: Teacher creates a space for children to talk about sharing and fairness	1.33	0.74	1.00	5.00	3.174
CSQK: Teacher encourages children to think about how they can help others who are in need	1.08	0.19	1.00	2.00	2.795
CSQK: Teacher encourages children to have their own opinions/ideas	3.32	0.95	1.00	5.00	−0.123
CSQK: Teachers include storybooks and other materials that explore social justice and equity themes	0.98	0.14	0.50	1.50	−0.041
CSQK: Teacher encourages children to question whether or not information is correct	1.52	0.70	1.00	3.25	0.974
ED: (Inverted score) Teacher uses "over control" with RML child(ren) which stifles children's behavior	4.69	0.63	2.25	5.00	−2.520
ED: (Inverted score) Teacher reprimands RML child(ren) with a judgmental and/or harsh tone	4.73	0.53	2.50	5.00	−2.503
ED: (Inverted score) Teacher calls out RML child(ren) repeatedly for misbehavior	4.35	0.75	2.25	5.00	−1.218
ED: (Inverted score) Teacher reprimands RML child(ren) in front of the group for misbehavior	4.31	0.70	2.25	5.00	−1.090
ED: (Inverted score) Boys are singled out in front of the group for misbehavior	3.88	0.80	2.50	5.00	−0.120
ED: (Inverted score) Teacher uses alienation as a punishment (e.g., sending children away from circle/activity to sit alone) for RML children	4.77	0.45	2.50	5.00	−2.084
ED: (Inverted score) Teacher has overly strict, rigid expectations for classroom behavior	4.76	0.48	2.50	5.00	−2.769
ED: (Inverted score) Teacher fails to engage children in problem-solving (or brainstorming) about the future consequences of misbehavior	4.69	0.57	2.50	5.00	−2.158
ED: (Inverted score) Teacher fails to engage children in problem-solving (or brainstorming) about the future consequences of misbehavior	2.98	1.24	1.00	5.00	0.144
*CHL: Teacher uses instructional materials that represent RML home life and community	1.83	0.91	0.75	5.00	1.167
CHL: Teacher provides opportunity for children to talk about their home life	1.66	0.60	1.00	3.00	0.627
CHL: Teacher inquires and talks about home activities	1.48	0.62	1.00	3.00	1.059
CHL: Teacher talks about children's social identities and family lives	1.19	0.40	1.00	3.00	2.533
CHL: Children share personal experiences such as home routines or their religious background	1.45	0.57	0.75	3.00	1.146
CHL: Teacher provides an opportunity for children to tell personal stories	1.46	0.61	1.00	3.00	1.171

Note. $N = 52$; RML = Racially Minoritized Learner; ACSES = Assessing Classroom Sociocultural Equity Scale; ELO = Equitable Learning Opportunities; CSQK = Challenging Status Quo Knowledge; ED = Equitable Discipline; CHL = Connection to Home Life. Items denoted with an asterisk (*) did not load in the subsequent EFA.

Table 2. Final exploratory factory analyses results: 5-factor solution.

ACSES Factors	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1: Challenging Status Quo Knowledge (7 items; α = .80)					
ELO: Teacher makes sustained eye contact and shows general interest to affirm RML child(ren)	0.660				
ELO: Teacher affirms RML child(ren)'s questions and encourages them to think more deeply	0.826				
CSQK: Teacher presents topics and materials that show RML learner(s) in positions of authority and having agency	0.833				
CSQK: Teacher encourages children to think about how they can help others who are in need	0.533				
CSQK: Teachers include storybooks and other materials that explore social justice and equity themes	−0.562				
CSQK: Teacher encourages children to question whether or not information is correct	0.709				
ED: (Inverted score) Teacher fails to engage children in problem-solving (or brainstorming) about the future consequences of misbehavior	0.594				
2: Equitable Learning Opportunities for RMLs (5 items; α = .90)					
ELO: RML children are given the opportunity to ask/answer questions		0.841			
ELO: RML children eagerly participate by raising their hand and responding to questions		0.862			
ELO: RML children are fully integrated into activities and engaged		0.895			
ELO: RML children are actively engaged and on-task		0.892			
ELO: Teacher listens and responds to RML children's questions/comments		0.734			
3: Equitable Discipline (8 items; α = .87)					
ED: (Inverted score) Teacher uses "over control" with RML child(ren) which stifles children's behavior			0.884		
ED: (Inverted score) Teacher reprimands RML child(ren) with a judgmental and/or harsh tone			0.860		
ED: (Inverted score) Teacher calls out RML child(ren) repeatedly for misbehavior			0.753		
ED: (Inverted score) Teacher reprimands RML child(ren) in front of the group for misbehavior			0.710		
ED: (Inverted score) Boys are singled out in front of the group for misbehavior			0.554		
ED: (Inverted score) Teacher uses alienation as a punishment (e.g., sending children away from circle/activity to sit alone) for RML children			0.604		
ED: (Inverted score) Teacher has overly strict, rigid expectations for classroom behavior			0.660		
ED: (Inverted score) Teacher escalates conflict and misbehavior (e.g., teacher stops in the middle of lesson to dismiss child)			0.751		
4: Connections to Home Life (6 items; α = .87)					
ELO: Teacher uses positive collective discipline to redirect children (e.g., "everyone's eyes should be up here")				0.441	
CHL: Teacher provides opportunity for children to talk about their home life				0.922	
CHL: Teacher inquires and talks about home activities				0.909	
CHL: Teacher talks about children's social identities and family lives				0.642	
CHL: Children share personal experiences such as home routines or their religious background				0.900	
CHL: Teacher provides an opportunity for children to tell personal stories				0.846	
5: Personalized Learning Opportunities (7 items; α = .74)					
ELO: Each child is given the opportunity to handle materials/objects					0.655
ELO: Teacher incorporates children's comments and reconnects them to lessons					0.475
ELO: Teacher challenges/scaffolds children according to their abilities					0.713
ELO: Teacher provides instructional content across a range of auditory, visual, and movement opportunities					0.580
ELO: Teacher waits for children to respond if they need more time formulating their verbal response					0.508
CSQK: Teacher provides children with open-ended, non-scripted activities that allow for creativity					0.610
CSQK: Teacher encourages children to have their own opinions/ideas					0.493

Note. N = 52; RML = Racially Minoritized Learner; ACSES = Assessing Classroom Sociocultural Equity Scale; ELO = Equitable Learning Opportunities; CSQK = Challenging Status Quo Knowledge; ED = Equitable Discipline; CHL = Connections to Home Life.

Factor loadings for and the internal consistency of the resulting five-factor model are displayed in Table 2. We refer to the first factor, which explained approximately 18% of the variance, as *Challenging Status Quo Knowledge*. This factor included seven items drawn from the ELO (n= 2), CSQK (n= 3), and ED (n= 1) dimensions (α = .80). The second factor, which we refer to as *Equitable Learning Opportunities for RMLs*, explained roughly 14% of the variance and included five items drawn from the ELO dimension (α = .90). The third factor, *Equitable Discipline*, included eight items drawn from the ED dimension (α = .87) and accounted for an additional 12% of the variance. The fourth factor, *Connections to Home Life*, was comprised of six items drawn from the ELO (n= 1) and the CHL (n= 5) dimensions and explained 9% of the variance (α = .87). The final factor, *Personalized Learning Opportunities*, included seven items from the ELO (n = 5) and CSQK (n = 2) dimensions (α = .74) and explained an additional 8% of the variance.

Validity

Although we note the limited size of the current sample and thus suggest caution in interpreting results, concurrent and divergent validity analyses were probed by calculating correlations between ACSES factors and CLASS domains and dimensions. As seen in Table 3, there were few significant correlations between ACSES factors and CLASS domains and dimensions, providing evidence for divergent validity. There were a few significant positive correlations that emerged as evidence of concurrent validity. At the domain level, a significant correlation emerged between *Personalized Learning Opportunities* and Instructional Support (r= .29; p < .05). In terms of CLASS dimensions, *Challenging Status Quo Knowledge* emerged as significantly correlated with Instructional Learning Formats (r= .39; p < .01), while *Equitable Discipline* was significantly correlated with Teacher Sensitivity (r= .34; p < .05). Finally, *Personalized Learning Opportunities* emerged as significantly correlated with Concept Development (r= .36; p < .05).

Relation between ACSES Factors and Teacher Characteristics

Once again advising caution in interpreting results given the limited size of the current sample, we considered correlations between ACSES factors and teacher characteristics. Specially, we considered teacher years of education, early childhood major, years of experience in early childhood, age, and race/ethnicity alongside each of the five ACSES factors. As illustrated in Table 4, only one significant correlation emerged, in which non-White race/ethnicity was negatively correlated with *Equitable Discipline* (r= −.34; p < .05).

Discussion

The purpose of the Assessing Classroom Sociocultural Equity Scale (ACSES) is to provide a valid and reliable assessment of equitable sociocultural interactions within early childhood classrooms (pre-K to Grade 3). ACSES was constructed from the ideological and pedagogical tenants of culturally relevant education (Ladson-Billings, 1995), culturally responsive education (Gay, 2000), anti-bias education (Derman-Sparks & Edwards, 2010), and a culturally relevant anti-bias framework (Iruka et al., 2014). There is a need for an early childhood measure that intentionally and specifically explores how teachers create instructional settings that are equitable for RML children and that focuses specifically on how children of color are treated in the classroom. Results of this study indicate (1) strong internal consistency and validity for the ACSES, (2) that the ACSES makes a contribution to the measurement of classroom interactions that is distinct from CLASS, and (3) ACSES scores were not correlated with many teacher demographic characteristics, except for teacher's ethnicity. Each of these findings is discussed in turn.

Table 3. Correlations of ACSES factors, CLASS domains, and CLASS dimensions.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ACSES Factors																		
1. CSQK	–																	
2. ELO	.28*	–																
3. ED	−.05	−.20	–															
4. CHL	−.35*	.02	.06	–														
5. PLO	−.20	.16	.02	.08	–													
CLASS Domains																		
6. ES	.10	.21	−.16	−.01	.21	–												
7. CO	.24	.12	−.19	−.01	.08	.59***	–											
8. IS	.19	.07	.13	−.08	.29*	.43***	.52***	–										
CLASS Dimensions																		
9. PC	.12	.16	−.07	−.02	.21	.90***	.62***	.45**	–									
10. NC	.15	−.10	.15	−.01	−.13	−.72***	−.34*	−.13	−.58***	–								
11. TS	.22	.34*	−.12	−.03	.20	.89***	.58***	.45**	.79***	−.50***	–							
12. RSP	.07	.09	−.21	.03	.15	.88***	.42**	.37**	.67***	−.57***	.68***	–						
13. BM	.08	.20	−.20	.00	.14	.70***	.82***	.40**	.70***	−.62***	.65***	.47***	–					
14. P	.10	−.03	−.10	−.10	−.01	.40**	.86***	.44**	.47***	−.30*	.30*	.31*	.63***	–				
15. ILF	.39**	.13	−.17	.07	.06	.38**	.84***	.46**	.40***	.01	.49***	.29*	.46***	.58***	–			
16. CD	.22	.06	.08	.11	.36*	.45**	.53***	.83***	.43***	−.09	.52***	.39**	.45**	.33*	.53***	–		
17. QF	.17	.12	.12	−.07	.23	.30*	.43**	.93***	.35*	−.02	.31*	.24	.32*	.38**	.39**	.74***	–	
18. LM	.12	.03	.15	−.20	.21	.42**	.44**	.88***	.42**	−.21	.40**	.36*	.33*	.43**	.35*	.55***	.72***	–

Note: CSQK = Challenging Status Quo Knowledge; ELO = Equitable Learning Opportunities for Racially Minoritized Learners; ED = Equitable Discipline; CHL = Connections to Home Life; PLO = Personalized Learning Opportunities; ES = Emotional Support; CO = Classroom Organization; IS = Instructional Support; PC = Positive Climate; NC = Negative Climate; TS = Teacher Sensitivity; RSP = Regard for Student Perspectives; BM = Behavior Management; P = Productivity; ILF = Instructional Learning Formats; CD = Concept Development; QF = Quality of Feedback; LM = Language Modeling. *$p < .05$, **$p < .01$, ***$p < .001$.

Table 4. Correlations of ACSES factors with teacher characteristics.

	1	2	3	4	5	6	7	8	9	10
ACSES Factors										
1. Challenging Status Quo Knowledge	–									
2. Equitable Learning Opportunities	.28*	–								
3. Equitable Discipline	−.05	−.20	–							
4. Connections to Home Life	−.35*	.02	.06	–						
5. Personalized Learning Opportunities	−.20	.16	.02	.08	–					
Teacher Demographics										
6. Education	.25	.16	.08	−.22	.18	–				
7. Years Experience	.02	.08	.18	.27	−.14	−.36*	–			
8. Teacher Age	−.10	−.17	.17	.14	−.06	−.15	.61***	–		
9. Non-White	.11	.08	−.34*	.06	−.15	−.46***	.32*	.16	–	
10. Early Childhood Major	.09	.04	.18	−.25	−.25	−.09	.07	.04	.04	–

Note: *$p < .05$, ***$p < .001$.

Internal Consistency and Validity

These preliminary results using a small sample of teachers are promising. Originally the measure started with 71 indicators across five dimensions, but after coding 142 classroom interactions across 52 teachers, our analyses resulted in a statistically significant and highly reliable 5-factor solution comprising 33 items. There was strong and adequate internal consistency for the 5-factor solution with Cronbach's alphas that ranged from .74 to .90, which are above the acceptable range.

Unique Contribution to Understanding Classroom Interactions

The most well-known and widely used measure of global classroom quality is CLASS, which measures Emotional Support, Classroom Organization, and Instructional Support. Our results show that Factor 5, Personalized Learning Opportunities, was significantly correlated with CLASS' Instructional Support domain. This is somewhat expected given the focus on scaffolding children's learning and provision of open-ended non-scripted activities in the ACSES items. There were also a handful of significant correlations between ACSES factors and CLASS dimensions, including links between Challenging Status Quo Knowledge with Instructional Learning Formats, Equitable Discipline with Teacher Sensitivity, and Personalized Learning Opportunities with Concept Development. These links are somewhat to be expected; Concept Development, for example, focuses on analysis and reasoning while the items in Personalized Learning Opportunities examine scaffolding and open-ended questions. However, we note that these three correlations were the only significant ones to emerge among the potential 50 that were probed (at a rate of only 6% significance), which is just above what is expected by chance. Because the CLASS was not designed to measure cultural aspects of classroom interaction and/or issues related to cultural, linguistic, or racial equity in the classroom, the lack of concurrent validity suggests that the two measures are distinct.

Teacher Demographics

Lastly, we found only a single correlation among teachers' socio-demographic and professional experiences and ACSES scores. Specifically, teacher non-White race/ethnicity was negatively correlated with *Equitable Discipline* scores, suggesting that non-White teachers may be less likely to demonstrate equitable discipline practices. In our sample, the majority of the non-White teachers were Black/African American (27% of the overall sample compared to only 2% Latina, 2% Asian, and 2% Other). Therefore, it is likely that Black teachers' responses were the driver behind this non-White teacher effect. In Gilliam et al. (2016) work, they report that Black teachers made hypothetical

decisions (based on vignettes) to expel/suspend Black children more frequently than making similar decisions for Whites. Black teachers also rated Black children's behavior as more severe than Whites children's, but once the teachers learned about family background challenges their ratings of severity softened. Their work also revealed that *both* White and Black teachers spent more time watching (as measured by eye gaze) Black children for behavior problems, particularly Black boys, but Black teachers spent even more time watching Black boys than their White counterparts. Our findings, coupled with those from Gilliam et al., demonstrate a need for deeper examination with a larger sample as to the interaction between teachers' ethnicity/race and their understanding of classroom behavior in order to approach a more comprehensive understanding of equitable disciplinary practices in the classroom.

Limitations

Because this study used secondary data for analysis, results may have been constrained by the purpose and design of the original MTP study. For instance, no bilingual classrooms were included in the original study; therefore, ACSES items designed to measure language diversity (originally theorized as part of the *Connections to Home Life* dimension) did not have enough variance to meaningfully load onto factors and were thus dropped. Furthermore, the data included only pre-K classrooms, which limits our ability to speak to how ACSES functions from Kindergarten through Grade 3. Finally, the preschool classrooms that we examined were engaged in scripted math and science lessons that were part of the larger MTP Study. The topic of the lessons could have constrained variation for some ACSES indicators. Indeed, Jensen et al. (2018) found that some indicators of the CASI were dependent on lesson content. For example, 41% of the total variation in their "Equity" dimension was explained by the lesson topic in their fully crossed measurement design using generalizability theory. Even with these limitations, however, the contribution of this work is important and novel as ACSES is the first known tool of its kind to examine equitable sociocultural interaction in early childhood programs. Future work with ACSES can address these limitations by examining a wider variety of lesson topics, linguistically diverse classrooms, and K-3 classrooms.

Contributions and Future Implications

ACSES was developed for both research and practical use and has important implications for future research, practice, and educational policy. In regard to future research, the finding that ACSES makes a contribution to the measurement of classroom interactions – distinct from CLASS – demonstrates that research and/or practical observations of teachers need to include both a measure such as the CLASS as well as one like the ACSES in order to get a full picture of how process quality specific to sociocultural equity are being addressed in the classroom. Given that there is a plethora of interpretive research to support how teachers' ideology or beliefs about children and pedagogical skills greatly impact educational and racial identity outcomes of RML children (Beasley, 2002; Burchinal & Cryer, 2003; Durden, Escalante, & Blitch, 2015; Hale, 2001; Hilliard, 2003; King, 1991), the inclusion of a tool like ACSES could be an important component to research protocols. ACSES can be used in future research to explore (1) the relationships between sociocultural equity in teaching and global measures of classroom quality, (2) the extent to which equitable sociocultural classroom interactions predict academic and other developmental gains for RML children, and (3) how contextual factors (e.g., teacher characteristics, classroom composition) moderate these effects.

In practice, ACSES was designed as a classroom observational tool that can be used both in pre-service and in-service professional development. For pre-service, faculty in higher education programs might utilize the tool as an educational outcome assessment for student teachers completing their pre-service practicum or fieldwork. It is imperative to develop pre-service teachers' ideological understandings and pedagogical skills related to sociocultural equitable interactions. Ladson-Billings (2005), specifically, has noted that future teachers need training in global high-quality teaching practices as well as training in

culturally relevant, anti-bias pedagogy for RMLs. ACSES can also be used for in-service training. Instructional coaches or master teachers within a school or center-based setting can use it to provide in-service support to serve and educate RML children in a high-quality, intellectually rigorous, and culturally sensitive manner. Whether used for pre-service or in-service training, ACSES should not be viewed as a means to an end, but rather as an integral tool in the *ongoing long-term* work of creating equitable learning experiences for young children across a variety of learning environments. Despite these potential practical uses, more research is needed to determine the "consequential validity" of ACSES (Haertel, 2018; Kane, 2013; Messick, 1998) to examine how it could be used in professional development settings to enhance equitable sociocultural interactions among teacher practices. For instance, Borko, Liston, and Whitcomb (2007) advise that a clear articulation of how certain measurement constructs relate to teaching, for whom such constructs are important, and at what outcome level the constructs are expected to influence practices (e.g., child behavior, teacher behavior, peer relationships, classroom as a whole) must be examined.

Lastly, this work has implications for education policy. Defining and measuring quality in early childhood education continues to be a significant challenge (La Paro, Thomason, Lower, Kitner-Duffy, & Cassidy, 2012), and policymakers and others in early education often argue, "We cannot improve what we cannot measure" (Bryk, Harding, & Greenberg, 2012, p. 97). We measure what we value, and we value what we measure. Examining global teaching quality and interactions alone will not dismantle the educational inequities present in our educational system. Identifying and examining structures and processes in early childhood classrooms that are most beneficial to RML children's development allows for the identification of the specific dimensions of quality for racially minoritized learners (Cassidy, Hestenes, Hegde, Hestenes, & Mims, 2005; Iruka & Morgan, 2014). By providing sound psychometric information about critical constructs of sociocultural equity for RML children, we create possibilities for educational improvements. We accomplish this by (1) making long-standing ideas in early education (e.g., culturally relevant, anti-bias pedagogy) more salient to a broader audience, (2) creating a body of evidence about what works for whom and under what circumstances, and (3) providing early educators with reliable information to improve equitable interactions in their classrooms.

Notes

1. Latinx is a pan-ethnic, non-gendered description of anyone of Latin American heritage.
2. But only ratings from one graduate-level coder were used in this study.

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Appendix

Table A1. Descriptives of items in cross peer collaboration supplemental dimension.

ACSES Items	Mean	*SD*	Min	Max	Skewness
CPC: RML and non-RML children share materials and cooperatively take turns	2.28	1.29	0.75	5.00	0.660
CPC: RML and non-RML child(ren) share ideas and opinions with peers	1.94	0.99	1.00	3.75	0.516
CPC: RML and non-RML children's actions are synchronized when working together (e.g., they know how to take turns and assign roles)	1.81	1.10	0.75	5.00	1.116
CPC: RML child(ren) are accepted and integrated into the classroom	4.83	0.37	3.50	5.00	−2.127
CPC: RML child(ren) take on (or are given) leadership roles	1.549	0.63	1.00	3.00	0.773
CPC: RML child(ren) take part in play and group learning activity with peers	4.54	0.64	2.75	5.00	−1.223
CPC: Children use RML child(ren) as sources of knowledge (e.g., peers ask them questions when working together)	1.20	0.42	1.00	2.50	2.030
CPC: Teacher shares RML's child's ideas/questions to the group	2.48	1.02	1.00	5.00	0.501
CPC: Non-RML children respond to RML peers' questions and comments	1.18	0.49	0.50	3.00	1.667
CPC: Peer conflict between RML and non-RML children is rare	4.47	0.87	1.50	5.00	−1.920
CPC: RML and non-RML children collaborate to choose classroom activities	0.93	0.23	0.25	1.75	−0.413
CPC: Teacher encourages group activities and/or work between RML and non-RML peers	1.08	0.39	0.50	2.50	2.353
CPC: Teacher encourages both RML and non-RML children to help each other	1.04	0.25	0.50	2.00	1.452
CPC: Teacher facilitates problem-solving among RML and non-RML peers	0.98	0.25	0.25	1.50	−0.457
CPC: RML and non-RML enjoy a warm relationship (e.g., they smile/laugh with each other, sit close)	2.66	1.08	1.00	5.00	0.423

Note. $N = 52$; RML = Racially Minoritized Learner; ACSES = Assessing Classroom Sociocultural Equity Scale; CPC = Cross Peer Collaboration.