A Validation Study of the Assessing Classroom Sociocultural Equity Scale (ACSES) in Pre-Kindergarten to Third Grade Classrooms

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Introduction
Racially marginalized learners (RMLs) experience racial bias in early childhood (EC) classrooms. Yet, the field of EC lacks precise observational tools to measure RMLs’ experiences.

The Assessing Classroom Sociocultural Equity Scale (ACSES) (Curenton et al., 2019) measures equitable, sociocultural interactions for RMLs in EC classrooms. This study aims to strengthen the knowledge base about the psychometric properties of ACSES.

Aim 1: To examine the underlying factor structure of ACSES in Pre-K to third grade classrooms.

Aim 2: To investigate patterns of convergent and divergent validity between ACSES and a widely used observational measure, CLASS.

Methods
Sample Description
We conducted a secondary analysis of 348 classroom videos from Pre-K to 3rd grade classrooms across four school districts from 2016-2019. To be included, videos needed to feature at least one RML. Most teachers were White (n = 62, 95.4%), and fewer teachers were Latina (n = 3, 3.1%) or Black (n = 1, 1.5%).

Measures
The ACSES (Curenton et al., 2019) contains 40 items (Table 1). There is emerging evidence to support the psychometric properties of ACSES (Curenton et al., 2019; Syed et al., 2021). CLASS (Pianta et al., 2008) was used to measure teacher-child interactions.

Procedures
For the ACSES training, coders attended a two-day virtual reliability training. 18.10% (n = 63) of videos were scored by multiple coders to check for inter-rater reliability (mean = 89.3%).

Analytic Strategy
To address aim 1, an exploratory factor analysis was conducted. To address aim 2, bivariate associations between ACSES and CLASS were examined.

Results
Figure 1. Histograms Depicting ACSES Scores in Each Dimension

Figure 2. ACSES Seven-Factor Structure

Table 1. Description of ACSES Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging Status Quo Knowledge</td>
<td>Conversations about equity and/or fairness</td>
</tr>
<tr>
<td>Equitable Learning Opportunities</td>
<td>Teacher affirms RMLs, asks higher order questions to RML</td>
</tr>
<tr>
<td>Inequitable Discipline</td>
<td>Behavior directives and/or punishment tactics are unfair, biased, or harsh</td>
</tr>
<tr>
<td>Connection to Home Life</td>
<td>Teacher provides opportunities for RMLs to talk about their family, personal life, or culture</td>
</tr>
<tr>
<td>Personalized Learning Opportunities</td>
<td>Class-wide instructional quality</td>
</tr>
<tr>
<td>RMLs Participation &amp; Engagement</td>
<td>RMLs comfort and willingness to share with teacher and peers</td>
</tr>
</tbody>
</table>

Note. Two items (CSQK_1 and CSQK_2) were removed, due to low variance. An EFA of the remaining 38 items was conducted. An oblique geomin rotation was used, with a ML estimator. Factor loadings needed to be 0.30 or greater. Figure 2 displays EFA results. Seven factors were proposed. Cronbach alphas indicated moderate to strong internal consistency.

Table 2. Correlations of ACSES Dimensions and CLASS Domains

<table>
<thead>
<tr>
<th>ACSES Dimension</th>
<th>Emotional Support</th>
<th>CLASS Domains</th>
<th>Instructional Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSQK</td>
<td>-.051</td>
<td>-.003</td>
<td>.108</td>
</tr>
<tr>
<td>ELO</td>
<td>.091</td>
<td>.104</td>
<td>.220**</td>
</tr>
<tr>
<td>ID</td>
<td>.495**</td>
<td>-.446**</td>
<td>-.340**</td>
</tr>
<tr>
<td>CHL</td>
<td>.212</td>
<td>.103</td>
<td>.207</td>
</tr>
<tr>
<td>PLO</td>
<td>.408**</td>
<td>.283**</td>
<td>.428**</td>
</tr>
<tr>
<td>PE</td>
<td>.001</td>
<td>.014</td>
<td>.108</td>
</tr>
</tbody>
</table>

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Aim 2: Convergent Validity

There were statistically significant correlations between the ACSES dimensions and CLASS domain, providing evidence for convergent validity (Table 2). Inequitable Discipline was negatively correlated with all CLASS domains, and Personalized Learning Opportunities was positively correlated with all CLASS domains.

Discussion

Classroom activities rarely focused on societal injustice or children’s home lives. The results from the EFA supported a seven-factor structure, which is similar to other research (Syed et al., 2021). ACSES measures similar, yet distinct, aspects of classroom quality to the CLASS.

Implications for Practice
ACSES may be used to guide in-service professional learning in Pre-K to 3rd grade.

Future Research
• A confirmatory factor analysis should be used to validate the dimensional structure of the measure.
• Research is needed to understand inequitable discipline and other aspects of classroom quality.

References

Contact

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