

Community and Youth Collaborative Institute
School Experience Surveys



Technical Report: Diversity
Elementary School Student Version

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THE OHIO STATE UNIVERSITY
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DIVERSITY

Elementary School Student Version

I. Definition of Construct

The *Diversity* scale assesses the degree to which students perceive that their school community accepts and supports a diverse student population.

II. Relevance for Practice

Past studies have demonstrated that enhanced experiences of fairness and acceptance of diversity relates to higher academic performance and positive youth development (Nichols & Good, 1998; Osterman, 2000). Students who attend racially integrated schools will be more likely to successfully communicate and collaborate with others in their professional lives (Kline, 2005).

III. Scale Description and Instructions

A. Items

1. At my school, students treat others who are different from them with respect.
2. At my school, teachers and other school staff treat all students with respect regardless of background or culture.
3. At my school, all students are treated equally.
4. At my school, it's ok to be different.
5. At my school, all students are treated the same regardless of where they come from.

B. Response Options

Response options for each item include the following:

- 1 = NO!
- 2 = No
- 3 = Yes
- 4 = YES!

C. Instructions for Respondents

These questions ask you to think about how students are accepted and treated at school. Please mark how strongly you feel about each sentence.

D. Instructions for Scale Administrators

For complete instructions on how to administer the survey, reference the “Student Survey Directions” that are printed on the survey itself. Once each student has a survey, explain that the purpose of the survey is to learn more about their experiences at school. They should mark one answer per statement, selecting the choice that best reflects how they feel.

As students finish, look thoroughly through the surveys to make sure that they didn't miss any items or questions. Please remember that students do NOT have to answer every question, but do encourage them to complete as much of the survey as possible. Remind students that their answers will help the school know how to best support them.

IV. Scoring Procedures

An average of the response scores from the 5 items should be calculated and used as an indicator of diversity, with higher scores reflecting students' perceiving their school is more accepting and supportive of a diverse student population.

V. Psychometric Properties of the Scale

A. Description of Sample

Participants used to test the psychometric properties of the scale included 2453 elementary school students from around the state of Utah. This included 1420 students in K-3rd grade (57.9%) and 1023 students in 4th – 6th grade (41.7%). The mean age of the students was 8.37 (SD = 2.13). Both males (50.7%) and females (48.5%) were represented. The students identified themselves as White/Non-Hispanic (42.4%), Latino/Latina (31.4%), Mixed/Multi-Racial (18.3%), African American (5.5%), or Asian (1.5%), and 24.3% indicated they received a free or reduced lunch. Data on these students were collected as part of a needs assessment within each school’s improvement planning process. Data were collected using the online instrument.

B. Basic Descriptive Statistics and Relevant Group Differences

Sample	Mean	SD	Range	α
Full Sample ($N = 2453$)	3.48	.57	1-4	.76
Gender				
Males ($n = 1244$)	3.45	.58	1-4	.76
Females ($n = 1190$)	3.50	.55	1-4	.76
Race/Ethnicity				
White/Non-Hispanic ($n = 1039$)	3.50	.55	1-4	.75
Latino/Latina ($n=771$)	3.45	.59	1-4	.75
Other ($n = 643$)	3.48	.58	1-4	.78
Grade Level				
K-3 rd ($n = 1420$)	3.53	.53	1-4	.72
4 th -6 th ($n = 1023$)	3.40	.61	1-4	.80

Note. Group specific data omits students who did not indicate their status. The groups were significantly different ($p < .05$), with the exception of race/ethnicity. The effect size (η^2) for the grade level comparison indicated that group membership differences accounted for 1% of the variance in the scores, where the gender differences account for less than 1% of the variance in the scores.

C. Maximum Value Percentages and Classification of Scores

<u>Percentages</u>		<u>Classification of Scores</u>		
Maximum Value	$\frac{1}{2}$ SD	Excelling	Emerging	Needs Improvement
87.0%	7.1%	94+	94-80	<80

Note. The max value percentages reflect the scale mean divided by the number of response options in the scale. This value allows the subscale to be compared with other measured constructs measured in the CAYCI surveys, thereby providing relative information regarding the extent to which students’ experiences are favorable across constructs. The classification of scores provides ranges of values based on the maximum value percentage plus or minus $\frac{1}{2}$ SD percentage. Based on these cut points, schools may determine where they stand on students’ experiences of acceptance and support for a diverse student population at their school relative to normed data.

D. Relationship between Diversity Scores and Other Student Perception Constructs

Construct	<i>r</i> =
Academic Motivation ^a	.27*
Academic Press ^b	.35*
Support for Learning ^b	.42*
School Connectedness ^b	.40*
Parent Involvement and Support ^b	.27*
Family and Community Connections ^b	.40*
Safety ^b	.51*

Notes. ^a Represents the students answer to the following item from the CAYCI surveys (Anderson-Butcher, Amorose, Iachini, & Ball, 2013): “I work my hardest every day at school”, with response options ranging from 1 (NO!) to 4 (YES!). ^b Average score on the respective subscale scores from the CAYCI surveys (Anderson-Butcher, Amorose, Iachini, & Ball, 2013). * relationship significant ($p < .01$).

E. Factorial Validity

A confirmatory factor analysis (CFA) was conducted using robust maximum likelihood estimation procedures in LISREL 8.71 (Scientific Software International, Inc., Chicago). The CFA model specified that the 5 items loaded on a single latent Diversity factor. The factor variance was freely estimated, as was the uniqueness for each item. No covariances between uniquenesses were modeled. The data were input using the asymptotic covariance matrix.

The overall fit of the model to the data was reasonably good based on commonly recommended cut off values for evaluating model fit (see Hu & Bentler, 1999), S-B $\chi^2 = 18.25$, $df = 5$, $p = .00$; RMSEA = .033 (90% CI = .018-.050), SRMR = .02; CFI = 1.00, TLI = .99. The table below presents the completely standardized factor loadings and uniquenesses for each item. Squared multiple correlations averaged .39. The modification indices did not suggest any major areas of local strain.

Item	Loading	Uniqueness
At my school, students treat others who are different from them with respect.	.54	.70
At my school, teachers and other school staff treat all students with respect regardless of background or culture.	.59	.65
At my school, all students are treated equally.	.69	.53
At my school, it's ok to be different.	.59	.66
At my school, all students are treated the same regardless of where they come from.	.70	.50

VII. Past and Future Scale Development

The current recommendation is to use the 5-item version of the measure as described in this report. Future scale development work may consider potentially modifying the items and/or response format to increase the variability in the scores and to increase the strength of the factor loadings. Further work also is needed to validate the Spanish version of this scale.

VII. Summary

Overall, the results of the psychometric testing indicate initial support for the reliability and validity of the Diversity scale with elementary students. The use of this measure could provide valuable information about elementary school students demonstrate that enhanced experiences of fairness and acceptance of diversity relates to higher academic performance and positive youth development.

VIII. References

- Anderson-Butcher, D., Amorose, A. J., Iachini, A., & Ball, A. (2013). Community and Youth Collaborative Institute School Experience Surveys. Columbus, OH: College of Social Work, The Ohio State University.
- Anderson-Butcher, D., Amorose, A.J., Iachini, A., & Ball, A. (2012). The development of the Perceived School Experiences Scale. *Research on Social Work Practice, 2*(2), 186-194.
- Hu, L. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.
- Kline, C. (2005). *The friendship factor: How interracial friendship benefits elementary school students*. Stanford, CA: Stanford University.
- Nichols, S.L. & Good, T.L. (1998). Students' perceptions of fairness in school settings: A gender analysis. *Teachers College Records, 100*(2), 369-401.
- Osterman, K.F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*(3), 323-367.

IX. Recommended Citation of Scale

When using the Diversity scale for program evaluation or research purposes, we recommend using the following citation:

Anderson-Butcher, D., Amorose, A. J., Iachini, A., & Ball, A. (2013). Community and Youth Collaborative Institute School Experience Surveys: Diversity Scale in Elementary School. Columbus, OH: College of Social Work, The Ohio State University.

If this scale is used along with additional Community and Youth Collaborative Institute School Experience Surveys, then the following citation would be appropriate to cover all scales:

Anderson-Butcher, D., Amorose, A. J., Iachini, A., & Ball, A. (2013). Community and Youth Collaborative Institute School Experience Surveys: Diversity Scale in Elementary School. Columbus, OH: College of Social Work, The Ohio State University.