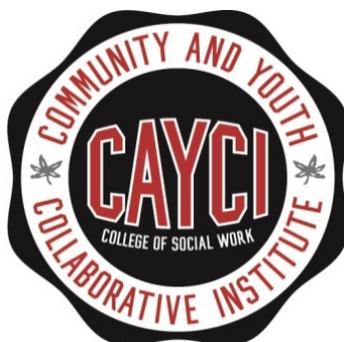


Community and Youth Collaborative Institute  
School Experience Surveys

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**Technical Report: Safety**  
Elementary School Student Version

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**THE OHIO STATE UNIVERSITY**  
COLLEGE OF SOCIAL WORK

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# **SAFETY**

## Elementary School Student Version

### **I. Definition of Construct**

The *Safety* scale assesses students' perceptions of their own personal safety at home, at school, and in their communities.

### **II. Relevance for Practice**

Safety is an important component for student success. Higher experiences of student safety and well-being contribute to students' positive youth development (Brookover, 1978; Duke, 2002; Farmer, 1999; Skiba, 2005).

### **III. Scale Description and Instructions**

#### *A. Items*

1. I feel safe in the community.
2. I feel safe at school.
3. I feel safe getting to and from school.

#### *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 about how safe you feel in a variety of places. 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 3 items should be calculated and used as an indicator of safety, with higher scores reflecting greater levels of experienced safety.

## V. Psychometric Properties of the Scale

### A. Description of Sample

Participants used to test the psychometric properties of the scale included 3264 elementary school students from around the state of Ohio. This included 884 students in K-3<sup>rd</sup> grade (27.1%) and 2290 students in 4<sup>th</sup> – 6<sup>th</sup> grade (70.2%). The mean age of the students was 10.31 (SD = 1.31). Both males (52.2%) and females (47.4%) were represented. The majority of students identified themselves as White/Non-Hispanic (85.9%), Mixed/Multi-Racial (8.4%), African American (3.7%), Latino/Latina (0.6%), or Asian (.7%), and 55.7% 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. Some data were collected using the online instrument, whereas others were collected via paper/pencil survey.

### B. Basic Descriptive Statistics and Relevant Group Differences

Sample	Mean	SD	Range	$\alpha$
Full Sample ( $N = 3264$ )	3.40	.66	1-4	.71
Gender				
Males ( $n = 1703$ )	3.41	.69	1-4	.69
Females ( $n = 1546$ )	3.47	.62	1-4	.74
Race/Ethnicity				
White/Non-Hispanic ( $n = 2804$ )	3.42	.64	1-4	.71
Other ( $n = 437$ )	3.29	.77	1-4	.75
Grade Level				
K-3 <sup>rd</sup> ( $n = 884$ )	3.51	.64	1-4	.71
4 <sup>th</sup> -6 <sup>th</sup> ( $n = 2290$ )	3.47	.67	1-4	.71

Note. Group specific data omits students who did not indicate their status. All groups were significantly different ( $p > .05$ ). The effect sizes ( $\eta^2$ ) for the gender, race/ethnicity, and grade level comparison indicated that group membership differences accounted for 1% of the variance in the scores.

### C. Maximum Value Percentages and Classification of Scores

Percentages		Classification of Scores		
Maximum Value	$\frac{1}{2}$ SD	Excelling	Emerging	Needs Improvement
85.0%	8.3%	93+	92-77	<77

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 safety relative to normed data.

*D. Relationship between Safety Scores and Other Student Perception Constructs*

Construct	<i>r</i> =
Academic Motivation <sup>a</sup>	.33*
Academic Press <sup>b</sup>	.32*
Support for Learning <sup>b</sup>	.46*
School Connectedness <sup>b</sup>	.54*
Parent Involvement and Support <sup>b</sup>	.36*
Family and Community Connections <sup>b</sup>	.50*

*Notes.* <sup>a</sup> 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!). <sup>b</sup> 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 conducting using robust maximum likelihood estimation procedures in LISREL 8.71 (Scientific Software International, Inc., Chicago). The CFA model specified that the 3 items loaded on a single latent Safety 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.

Given this model was just identified, the overall fit of the model to the data was perfect, S-B  $\chi^2 = 0$ ,  $df = 0$ ,  $p = 1.00$ . The table below presents the completely standardized factor loadings and uniquenesses for each item. Squared multiple correlations averaged .47.

Item	<i>Loading</i>	<i>Uniqueness</i>
I feel safe in the community.	.55	.70
I feel safe at school.	.77	.41
I feel safe getting to and from school.	.72	.48

**VII. Past and Future Scale Development**

An initial version of the Safety scale included 1 additional item: “I feel safe at home.” Results from preliminary analyses indicated that this item did not fit well with the other scale items. Thus the current recommendation is to use the 3-item version of the measure as described in this report. Future scale development work may consider adding additional items to attempt to capture a greater breath of situations impacting feelings of safety. Finally, work 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 Safety scale with elementary school students. The use of this measure could provide valuable information about students’ experiences safety and well-being are related to student’s ability to obtain 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.
- Brookover, W. (1978). Elementary school social climate and school achievement. *American Educational Research Journal, 15*, 301-318.
- Duke, D. L. (2002). *Creating safe schools for all children*. Boston: Allyn & Bacon.
- Farmer, G. L. (1999). Disciplinary practices and perceptions of school safety. *Journal of Social Work, 26*(1), 1-37.
- 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.
- Skiba, R. (2005). Beyond guns, drugs, and gangs: The structure of student perceptions of school safety. *Journal of School Violence, 3*(2/3), 149-171

## IX. Recommended Citation of Scale

When using the Safety 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: Safety 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. Columbus, OH: College of Social Work, The Ohio State University.