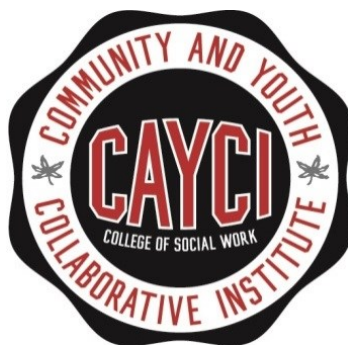


Community and Youth Collaborative Institute  
School Experience Surveys

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**Technical Report: Family & Community  
Connections**  
Middle/High School Student Version

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## **FAMILY & COMMUNITY CONNECTIONS**

Middle & High School Student Version

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

The *Family & Community Connections* scale measures whether students feel connected to their families and their communities. Feelings of connection encompass a sense of belonging, social responsibility, and meaningful relationships with adults.

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

Past studies have demonstrated that enhanced experiences of family and community connection relate to higher academic performance and positive youth development (Sheldon & Epstein, 2005; Sheldon & Epstein, 2002).

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

#### *A. Items*

1. I feel like I really belong to my family.
2. I have a sense of responsibility to the community I live in.
3. I feel like I am an important part of my community.
4. There are responsible adult mentors in my community who support and encourage me.

#### *B. Response Options*

Response options for each item include the following:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neither Disagree or Agree
- 4 = Agree
- 5 = Strongly Agree

#### *C. Instructions for Respondents*

The following questions ask you about your family and community. For each of the following statements, please fill in ONE circle that best represents your answer.

#### *D. Instructions for Scale Administrators*

For complete instructions on how to administer the survey, reference the “Student Survey Directions” that are printed within 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 4 items should be calculated and used as an indicator of family and community connections, with higher scores reflecting greater levels of experienced connectedness.

#### V. Psychometric Properties of the Scale

##### A. Description of Sample

Participants used to test the psychometric properties of the scale included 5154 middle school (6-8<sup>th</sup> grade; 44.5%) and high school (9-12<sup>th</sup> grade; 54.5%) students from around the state of Ohio. The participants included 2615 males (50.7%) and 2474 (48.0%) females. The majority of students identified themselves as White/Non-Hispanic (85.4%), Mixed/Multi-Racial (8.5%), African American (3.3%), Latino/Latina (0.9%), or Asian (0.9%), and 47.5% 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 ( $N = 5154$ )	3.70	.92	1-5	.82
Gender				
Males ( $n = 2615$ )	3.67	.93	1-5	.82
Females ( $n = 2474$ )	3.74	.91	1-5	.83
Race/Ethnicity				
White/Non-Hispanic ( $n = 4404$ )	3.72	.91	1-5	.82
Other ( $n = 750$ )	3.61	.97	1-5	.83
School-Type				
Middle School ( $n = 2296$ )	3.83	.86	1-5	.80
High School ( $n = 2808$ )	3.60	.96	1-5	.83

*Note.* Group specific data omits students who did not indicate their status. All groups were significantly different ( $p < .05$ ), with the exception of school level. The effect sizes ( $\eta^2$ ) for each comparison indicated that group membership accounted for less than 2% 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
74.0%	9.2%	83+	82-65	<65

*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 family and community connections relative to normed data.

*D. Relationship between Family and Community Connections scores and other Student Perception Constructs*

Construct	<i>r</i> =
Academic Motivation <sup>a</sup>	.47*
School Connectedness <sup>a</sup>	.48*
Academic Press <sup>a</sup>	.39*
Self-Reported Grades <sup>b</sup>	-.23*
Support for Learning <sup>c</sup>	.58*

*Notes.* <sup>a</sup> Average scores on the respective subscale from the Perceived School Experience Scale (Anderson-Butcher, Amorose, Iachini, & Ball, 2013). <sup>b</sup> Students responded to the question “On average what grades do you get in school?” with response options ranging from 1 (mostly A’s) to 9 (mostly F’s). <sup>c</sup> Average score on the Support for Learning Scale (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 4 items loaded on a single latent Family and Community Connections 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 good based on commonly recommended cut off values for evaluating model fit (see Hu & Bentler, 1999), S-B  $\chi^2 = 19.60$ ,  $df = 2$ ,  $p = .00$ ; RMSEA = .041 (90% CI = .026-.059), SRMR = .01; CFI = 1.00, TLI = .99. The table below presents the completely standardized factor loadings and uniquenesses for each item. Squared multiple correlations averaged .56. The modification indices did not suggest any major areas of local strain.

Item	Loading	Uniqueness
I feel like I really belong to my family.	.52	.73
I have a sense of responsibility to the community I live in.	.85	.28
I feel like I am an important part of my community.	.85	.27
There are responsible adult mentors in my community who support and encourage me.	.70	.50

**VII. Past and Future Scale Development**

An initial version of the Family and Community Connections scale included 1 additional item: “There are adults in my community that I could go to for help if I needed it.” 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 4-item version of the measure as described in this report. Future scale development work may consider revising items #1 (“I feel like I really belong to my family.”) given its relatively lower factor loading. Further, adding additional items – particularly expanding the number of items focusing on family connections - may enhance the overall quality of the measure. Last, further work is needed to validate the Spanish version of this tool.

## VII. Summary

Overall, the results of the psychometric testing indicate initial support for the reliability and validity of the Family and Community Connections scale with middle and high school students. The use of this measure could provide valuable information about students' experiences of family and community connection and how they relate 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: Support for Learning Scale in Middle School and High School. 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.
- Sheldon, S.B. & Epstein, J.L. (2005). Involvement counts: Family and community partnerships and mathematic achievement. *Journal of Education Research, 98*(4), 196-207.
- Sheldon, S.B. & Epstein, J.L. (2002). Improving student behavior and school discipline with family and community involvement. *Education and Urban Society, 35*(1), 4-26.

## IX. Recommended Citation of Scale

When using the Family and Community Connections 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: Family and Community Connections Scale in Middle School and High 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.