Community and Youth Collaborative Institute School Experience Surveys



# Technical Report: Family & Community Connections

Elementary School Student Version

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COLLEGE OF SOCIAL WORK

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# FAMILY & COMMUNITY CONNECTIONS

Elementary 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 feel like I am an important part of my community.
- 3. There are adults in my community who support and encourage me.
- 4. There are adults in my community that I could go to for help if I needed it.

# B. Response Options

Response options for each item include the following:

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

#### C. Instructions for Respondents

The following questions ask you about your family and community. Please mark how strongly you feel about each sentence.

#### D. Instructions for Scale Administers

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 4 items should be calculated and used as an indicator of family and community connections, with higher scores reflecting greater levels of perceived connectedness.

# V. Psychometric Properties of the Scale

#### A. Description of Sample

Participants used to test the psychometric properties of the scale included 3344 elementary school students from around the state of Ohio. This included 875 students in K-3<sup>rd</sup> grade (26.2%) and 2275 students in 4<sup>th</sup> – 6<sup>th</sup> grade (68.0%). The mean age of the students was 10.31 (SD = 1.31). Both males (50.7%) and females (45.7%) were represented. The majority of students identified themselves as White/Non-Hispanic (83.0%), Mixed/Multi-Racial (8.3%), African American (3.6%), Latino/Latina (0.6%), or Asian (.7%), and 54.2% 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 on-line instrument, whereas others were collected via paper/pencil survey.

Sample	Mean	SD	Range	α
Full Sample ( $N = 3344$ )	3.48	.56	1-4	.74
Gender				
Males ( <i>n</i> = 1697)	3.43	.56	1-4	.72
Females ( $n = 1527$ )	3.51	.55	1-4	.75
Race/Ethnicity				
White/Non-Hispanic ( $n = 2777$ )	3.47	.55	1-4	.73
Other $(n = 439)$	3.44	.60	1-4	.74
Grade Level				
K-3 <sup>rd</sup> $(n = 875)$	3.59	.53	1-4	.75
$4^{\text{th}}$ -6 <sup>th</sup> ( <i>n</i> = 2275)	3.44	.55	1-4	.72

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

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 sizes  $(\eta^2)$  for the gender and grade level comparison indicated that group membership differences accounted for 2% of the variance in the scores, where the race/ethnicity differences account for less that 1% of the variance in the scores.

# C. Maximum Value Percentages and Classification of Scores

Percentages		Classification of Scores		
Maximum Value	½ SD	Excelling	Emerging	Needs Improvement
87.0%	7.0%	94+	93-80	<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 ½ SD percentage. Based on these cut points, schools may determine where they stand on students' experiences of 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>	.41*
Academic Press <sup>b</sup>	.37*
Support for Learning <sup>b</sup>	.40*
School Connectedness <sup>b</sup>	.39*
Parent Involvement and Support <sup>b</sup>	.41*

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 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 reasonably good based on commonly recommended cut off values for evaluating model fit (see Hu & Bentler, 1999), S-B  $\chi^2 = 30.72$ , df = 2, p = .00; RMSEA = .066 (90% CI = .046-.087), SRMR = .03; CFI = .99, TLI = .98. The table below presents the completely standardized factor loadings and uniquenesses for each item. Squared multiple correlations averaged .42.

Item	Loading	Uniqueness
I feel like I really belong to my family.	.49	.76
I feel like I am an important part of my community.	.62	.62
There are adults in my community who support and encourage	.76	.42
me. There are adults in my community that I could go to for help if I needed it.	.70	.51

# VII. Past and Future Scale Development

The current recommendation is to use the 4-item version of the Family and Community Connections scale as described in this report. Future scale development work may consider revising item #1 ("I feel like I really belong to my family") given its relatively lower factor loading. Adding additional items – particularly expanding the number of items focusing on family connections - may enhance the overall quality of the measure. Finally, work also is needed to validated 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 Family and Community Connections scale with elementary school students. The use of this measure could provide valuable information about students' enhanced experiences of family and community connection relate 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.
- 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 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.