Community and Youth Collaborative Institute School Experience Surveys



# Technical Report: Academic Press Elementary School Student Version

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# **ACADEMIC PRESS**

Elementary School Student Version

# I. Definition of Construct

The *Academic Press* scale assesses the extent to which students perceive a normative emphasis on academic success and conformity to specific standards of achievement across their school community (including teachers and other students).

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

Research identifies academic press as a critical component of effective schools, and it is also recognized as an effective measure for overall student achievement (Byrk, 2010; Murphy, Weil, Hallinger & Mitman, 1982; Lee & Smith, 1999; McDill, Natriello & Pallas, 1986).

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

A. Items

- 1. My school wants me to learn a lot.
- 2. My parents want me to learn a lot.
- 3. My teacher wants me to learn a lot.

#### 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 about your experiences at school. 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 3 items should be calculated and used as an indicator of academic press, with higher scores reflecting students reporting greater feelings of press.

# V. Psychometric Properties of the Scale

#### A. Description of Sample

Participants used to test the psychometric properties of the scale included 512 elementary school students from around the state of Ohio. This included 155 students in K-3<sup>rd</sup> grade and 341 students in  $4^{th} - 6^{th}$  grade. The mean age of the students was 11.03 (SD = 1.04). Both males (53.9%) and females (43.6%) were represented. The majority of students identified themselves as White/Non-Hispanic (93.0%), Mixed/Multi-Racial (4.6%), African American (1.6%), Latino/Latina (0.6%), or Asian (0.2%), and 58.6% 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 ( $N = 512$ )	3.88	.32	1-4	.82
Gender				
Males ( $n = 276$ )	3.90	.27	1-4	.72
Females $(n = 223)$	3.86	.38	1-4	90
Race/Ethnicity				
White/Non-Hispanic ( $n = 465$ )	3.89	.30	1-4	.80
Other $(n = 35)$	3.82	.57	1-4	.93
Grade Level				
K- $3^{\rm rd}$ ( <i>n</i> = 155)	3.92	.32	1-4	.90
$4^{\text{th}} - 6^{\text{th}} (n = 341)$	3.87	.32	1-4	.80

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

Notes. Group specific data omits students who did not indicate their status. The groups were not significantly different (p<.05), and the effect sizes ( $\eta^2$ ) indicated that group membership differences accounted for 1% of the variance in the scores.

# C. Maximum Value Percentages and Classification of Scores

Percentag	ges	Classification of Scores		bres
Maximum Value	½ SD	Excelling	Emerging	Needs Improvement
97.0%	4.0%	100	99-93	<93

Notes. 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 academic press relative to normed data.

#### D. Relationship between Academic Press Scores and Other Student Perception Constructs

Construct	r =
Academic Motivation <sup>a</sup>	.29*
School Connectedness <sup>b</sup>	.43*
Support for Learning <sup>b</sup>	.46*

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 Academic Press 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 .63.

Item	Loading	Uniqueness
My school wants me to learn a lot.	.77	.41
My parents want me to learn a lot.	.65	.58
My teacher wants me to learn a lot.	.93	.13

# VII. Past and Future Scale Development

An initial version of the Academic Press scale included 1 additional item: "Students at my school try hard to get good grades." 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 tapping aspects of academic press and potentially modifying the response format to increase the variability in the scores. 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 Academic Press scale with elementary school students. The use of this measure could provide valuable information about the effectiveness of the school and as it relates to measuring overall student achievement.

# 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.

Bryk, A. S. (2010). Organizing schools for improvement. Phi Delta Kappan, 91, 23-30.

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- Lee, V. E., & Smith, J. B. (1999). Social support and achievement for young adolescents in Chicago: The role of school academic press. *American Educational Research Journal*, 36, 907-945
- McDill, E. L., Natriello, G., & Pallas, A. (1986). A population at risk: Potential consequences of tougher school standards for student dropouts. *American Journal of Education*, 94, 135-181.
- Murphy, J. F., Weil, M., Hallinger, P., & Mitman, A. (1982). Academic press: Translating high expectations into school policies and classroom practices. *Educational Leadership*, 40, 22-26.

#### IX. Recommended Citation of Scale

When using the Academic Press 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: Academic Press 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.