Community and Youth Collaborative Institute School Experience Surveys



Technical Report: Support for Learning

Elementary School Student Version

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SUPPORT FOR LEARNING

Elementary School Student Version

I. Definition of Construct

The *Support for Learning* scale assesses students' experiences of the support their family and school staff provide for their learning and social-emotional development.

II. Relevance for Practice

Research has shown that when students experience support for learning from their schools and family, these experiences help to promote positive youth development as well as increase students' academic success (Reeve & Hyungshim, 2006; Reeve et al., 2004; Skinner & Belmont, 1993; Wentzel, 1998). By supporting students' autonomy, teachers can better engage their students in classroom content (Reeve et al., 2004) and motivate higher levels of academic success (Reeve & Hyungshim, 2006). Student motivation also is enhanced by positive student-teacher relationships (Skinner & Belmont, 1993; Wentzel, 1998).

III. Scale Description and Instructions

A. Items

- 1. When I have a problem, I get help from my family.
- 2. When I have a problem, I get help from my teacher.
- 3. I would go to my teacher for help if I needed it.
- 4. My teacher would notice if I was not in 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 you about the support for learning you receive from adults. 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 support for learning, with higher scores indicating that students report greater feelings of support.

V. Psychometric Properties of the Scale

A. Description of Sample

Participants used to test the psychometric properties of the scale included 3374 elementary school students from around the state of Ohio. This included 882 students in K-3rd grade (26.1%) and 2265 students in 4th – 6th grade (67.1%). The mean age of the students was 11.30 (SD = 1.30). Both males (49.9%) and females (45.6%) were represented. The majority of students identified themselves as White/Non-Hispanic (82.2%), Mixed/Multi-Racial (8.2%), African American (3.6%), Latino/Latina (0.6%), or Asian (.7%), and 53.7% 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 on-line instrument, whereas others were collected via paper/pencil survey.

B. Basic Descriptive Statistics and Relevant Group Differences

Sample	Mean	SD	Range	α
Full Sample ($N = 3374$)	3.37	.54	1-4	.69
Gender				
Males $(n = 1684)$	3.32	.56	1-4	.67
Females $(n = 1537)$	3.45	.52	1-4	.71
Race/Ethnicity				
White/Non-Hispanic ($n = 2772$)	3.38	.53	1-4	.68
Other $(n = 441)$	3.36	.59	1-4	.70
Grade Level				
$K-3^{rd}$ ($n = 882$)	3.56	.47	1-4	.64
$4^{\text{th}} - 6^{\text{th}} (n = 2265)$	3.32	.54	1-4	.68

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 (η^2) for the gender and grade level comparison indicated that group membership differences accounted for 1% and 4% of the variance in the scores, respectively, where the race/ethnicity differences account for less that 1% of the variance in the scores.

C. Maximum Value Percentages and Classification of Scores

Percentage	<u>es</u>	Classification of Scores		
Maximum Value	½ SD	Excelling	Emerging	Needs Improvement
84.8%	6.8%	92+	91-78	<78

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 support for learning relative to normed data.

D. Relationship between Support for Learning Scores and Other Student Perception Constructs

Construct	r =
Academic Motivation ^a	.45*
Academic Press ^c	.44*
Support for Learning ^c	.55*

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 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 Support for Learning 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 χ^2 = 1.45, df = 2, p = .48; RMSEA = .00 (90% CI = .000-.031), SRMR = .01; CFI = 1.00, TLI = 1.00. 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
When I have a problem, I get help from my family.	.48	.77
When I have a problem, I get help from my teacher.	.79	.37
I would go to my teacher for help if I needed it.	.68	.53
My teacher would notice if I was not in school.	.46	.79

VII. Past and Future Scale Development

An initial version of the support for learning scale included 2 additional items: (1) "There is at least 1 adult in my school who knows me well," and (2) "There is at least 1 adult in my school who cares about me." Results from preliminary analyses indicated that these items 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 ("When I have a problem, I get help from my family") and #4 ("My teacher would notice if I was not in school") given their relatively lower factor loadings. Adding additional items to capture a broader range of supports for learning that occur within the school context may enhance the overall quality of the measure. Finally, work is needed to validate the Spanish version of this scale.

VII. Summary

Overall, the results of the psychometric testing indicate lower alpha coefficients in the initial support for the reliability and validity of the Support for Learning scale with elementary school students. Future research should look to enhance reliability and validity of the measure. The use of this measure could provide valuable information about students' experiences of their school's support in the student's academic success (Reeve & Hyungshim, 2006; Reeve et al., 2004). Student motivation can further be influenced by the student-teacher interpersonal relationships (Skinner & Belmont, 1993; Wentzel, 1998).

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.
- Reeve, J., & Hyungshim, J. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, 98(1), 209–218.
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and Emotion*, 28(2), 147–169.
- Skinner, E.A., & Belmont, M.J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571–581.
- Wentzel, K.R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*, 90(2), 202–209.

IX. Recommended Citation of Scale

When using the Support for Learning 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: Support for Learning 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.