

Community and Youth Collaborative Institute
School Experience Surveys



Technical Report: Internalizing Behaviors
Elementary School Student Version

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INTERNALIZING BEHAVIORS

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I. Definition of Construct

The *Internalizing Behavior* scale assesses the extent to which students report behaviors and feelings that are sometimes referred to as "inhibited behaviors" (see the work of Thomas Achenbach). These feelings and behaviors are those that are dealt with internally, rather than by acting them out in the home or school.

II. Relevance for Practice

Internalizing behaviors have been shown to significantly influence students' success in the classroom (Rapport, Denney, Chung & Hustace, 2001). Specifically, the literature shows a relationship between low self-esteem, lower school achievement, and maladaptive achievement strategies in students who frequently experience internalizing behaviors (Aunola, Stattin & Nurmi, 2000; Ansary & Luthar, 2009).

III. Scale Description and Instructions

A. Items

1. In the past week, I felt sad.
2. In the past week, I felt afraid.
3. In the past week, I felt lonely.
4. In the past week, people were not nice to me.
5. In the past week, I felt worried.
6. In the past week, I felt like I didn't matter.
7. In the past week, I had trouble sleeping.
8. In the past week, I felt shy.
9. In the past week, I felt others didn't like me.

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 feelings you might have experienced during the week. 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 9 items should be calculated and used as an indicator of internalizing behaviors, with higher scores reflecting higher rates of internalizing behaviors reported by students.

V. Psychometric Properties of the Scale

A. Description of Sample

Participants used to test the psychometric properties of the scale included 2399 elementary school students from around the state of Utah. This included 1399 students in K-3rd grade and 986 students in 4th – 6th grade. The mean age of the students was 8.34 (SD = 2.15). Both males (50.7%) and females (48.3%) were represented. The students identified themselves as White/Non-Hispanic (42.1%), Latino/Latina (31.2%), Mixed/Multi-Racial (18.4%), African American (5.8%), or Asian (1.5%), and 23.9% 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. Data were collected using the online instrument.

B. Basic Descriptive Statistics and Relevant Group Differences

Sample	Mean	SD	Range	α
Full Sample ($N = 2399$)	2.99	.80	1-4	.87
Gender				
Males ($n = 1217$)	3.04	.81	1-4	.88
Females ($n = 1159$)	2.93	.80	1-4	.87
Race/Ethnicity				
White/Non-Hispanic ($n = 1009$)	2.98	.81	1-4	.88
Latino/Latina ($n=749$)	3.02	.80	1-4	.87
Other ($n = 641$)	2.95	.79	1-4	.87
Grade Level				
K-3 rd ($n = 1399$)	2.85	.82	1-4	.87
4 th -6 th ($n = 986$)	3.17	.74	1-4	.88

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 size (η^2) for the grade level comparison indicated that group membership differences accounted for 4% of the variance in the scores, where the gender differences account for less than 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
74.8%	10.0%	85+	84-65	<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 acceptance and support for a diverse student population at their school relative to normed data.

D. Relationship between Internalizing Behavior Scores and Other Student Perception Constructs

At this time we have not explored this construct in relationship to other measures of validity.

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 9 items loaded on a single latent Internalizing Behavior 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 $\chi^2 = 171.41$, $df = 27$, $p = .00$; RMSEA = .047 (90% CI = .041-.054), SRMR = .03; CFI = .99, TLI = .99. The table below presents the completely standardized factor loadings and uniquenesses for each item. Squared multiple correlations averaged .44.

Item	Loading	Uniqueness
In the past week, I felt sad.	.67	.55
In the past week, I felt afraid.	.70	.51
In the past week, I felt lonely.	.75	.44
In the past week, people were not nice to me.	.65	.58
In the past week, I felt worried.	.72	.48
In the past week, I felt like I didn't matter.	.66	.57
In the past week, I had trouble sleeping.	.53	.72
In the past week, I felt shy.	.59	.65
In the past week, I felt others didn't like me.	.69	.53

VII. Past and Future Scale Development

An initial version of the scale included an additional item: (1) "In the past week, I felt like I didn't care about anything." 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 9-item version of the measure as described in this report. Future scale development work may consider potentially modifying the items and/or response format to increase the variability in the scores and to increase the strength of the factor loadings. Additional work could also be done to consider the relationship of internalizing behaviors with other pertinent constructs. Finally, 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 Internalizing Behavior scale with elementary students. In the literature, internalizing behaviors have been shown to significantly influence students' success in the classroom (Rapport, Denney, Chung & Hustace, 2001). Therefore, it is important for educators to be aware of students' needs if they are experiencing such feelings and behaviors.

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.
- Ansary, N.S. & Luthar, S.S. (2009). Distress and academic achievement among adolescents of affluence: A study of externalizing and internalizing problem behaviors and school performance. *Development and Psychopathology, 21*, 319-341.
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- 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.
- Rapport, M.D., Denney, C.B., Chung, K. & Hustace, K. (2001). Internalizing behavior problems and scholastic achievement in children: Cognitive and behavioral pathways as mediators of outcomes. *Journal of Clinical Child Psychology, 30*(4), 536-551.

IX. Recommended Citation of Scale

When using the Internalizing Behavior 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: Internalizing Behaviors 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.