Community and Youth Collaborative Institute School Experience Surveys



Technical Report: Experiences of Teacher & School Support

Parent Version

Produced By:

Dawn Anderson-Butcher, Anthony J. Amorose, Aidyn Iachini, and Annahita Ball

Community and Youth Collaborative Institute
College of Social Work
The Ohio State University

Updated: Summer 2015



EXPERIENCES OF TEACHER & SCHOOL SUPPORT

Parent Version

I. Definition of Construct

The *Experiences of Teacher and School Support* scale measures parents'/caregivers' perceptions of the support provided by school staff and teachers.

II. Relevance for Practice

Teacher-student relationships are essential to support learning and positive youth development in schools (Mashburn & Pianta, 2006). Students who perceive their teachers as caring and fair are more likely to have greater academic motivation, school engagement, self-esteem, and school success (Eccles, 2004; Gay, 2010; Hudley & Daoud, 2007). Often, children are influenced by the ideas, attitudes, and opinions of their parents or caregivers. Thus, a greater understanding of how parents and caregiver perceive support from teachers and staff may inform the need for relationship building and parental engagement in schools.

III. Scale Description and Instructions

A. Items

- 1. Students can talk to their teachers about problems that are bothering them.
- 2. In their interactions with students, all school staff act in ways that demonstrate the character qualities the school is trying to teach.
- 3. Teachers go out of their way to help students who need extra help.
- 4. In this school, you can count on adults to try to make sure students are safe.
- 5. In their interactions with students, teachers act in ways that demonstrate the character qualities the school is trying to teach.
- 6. This school treats parents/caregivers in a way that makes them feel respected (welcomed, valued, cared about).

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

We are interested in learning about your perceptions of your child's school. For each statement, please fill in the ONE circle that best represents your answer.

D. Instructions for Scale Administers

Surveys can be self-administered or administered to parents in person or online. Explain that the purpose of the survey is to learn more about their perceptions about their student's school and their community. They should select one answer per request, and make a choice based on the answer that best reflects how they feel. They may submit the survey when they have completed it.

If administered in person, look through the finished surveys to make sure that parents didn't miss any items or questions. Please remember that they do not have to answer every question, but do encourage them to complete as much of the survey as possible, reminding them their answers will help the school know how to best support its students and families.

IV. Scoring Procedures

An average of the response scores from the 6 items should be calculated and used as an indicator of parents'/caregivers' experiences of teacher and school support for students, with higher scores reflecting greater levels of perceived support.

V. Psychometric Properties of the Scale

A. Description of Sample

Participants used to test the psychometric properties of the scale included 1,516 parents/caregivers of elementary school students from around the state of Utah. This included 1,186 mothers, 233 fathers, 23 grandmothers, 8 grandfathers, 12 legal guardians (not parents), 2 foster parents, and 12 others. The majority of respondents reported a high school diploma as the highest level of education completed (42.1%). In addition, some respondents had earned an associate's degree (18.9%), bachelor's degree (15.3%), master's degree (2.4%), or doctoral degree (0.9%). The remaining 16.8%, however, reported that they had not completed high school. The respondents identified themselves as White/Non-Hispanic (45.8%), Latino/Latina (42.9%), Mixed/Multi-Racial (4.6%), African American (1.7%), or Asian (1.2%). Data on these parents/caregivers were collected as part of a needs assessment within each school's improvement planning process. All data were collected using paper/pencil surveys.

B. Basic Descriptive Statistics and Relevant Group Differences

Sample	Mean	SD	Range	α
Full Sample ($N = 1516$)	4.14	.69	1-5	.90
Gender				
Males $(n = 318)$	4.10	.65	1-5	.88
Females $(n = 1156)$	4.15	.69	1-5	.90
Education Level				
Less than High School ($n = 255$)	4.22	.71	1-5	.91
High School Degree $(n = 638)$	4.15	.67	1-5	.90
Post-Secondary Degree ($n = 623$)	4.10	.70	1-5	.89
Race/Ethnicity				
White/Non-Hispanic $(n = 695)$	4.06	.70	1-5	.90
Latino/Latina (<i>n</i> =651)	4.26	.65	1-5	.89
Other $(n = 170)$	4.03	.72	1-5	.90
Language Version				
English $(n=979)$	4.05	.70	1-5	.90
Spanish (<i>n</i> = 537)	4.30	.64	1-5	.89

Note. Group specific data omits respondents who did not indicate their status. Analyses indicated significant differences (p<.01) across racial/ethnic groups and language versions, while gender and education level were non-significant (p>.05). Follow-up tests revealed that the Latino/Latina group reported significantly higher scores than the other race/ethnicity groups, which did not differ from each other. Those completing the Spanish version of the scale reported higher scores than those completing the English version. The effect size (η^2) indicated that race/ethnicity group membership accounted for 2% of the variance in the scores and language version accounted for 3% of the variance in the scores.

C. Maximum Value Percentages and Classification of Scores

Percent	ages_		Classification of Scor	res_
Maximum Value	½ SD	Excelling	Emerging	Needs Improvement
82.8%	6.9%	90+	89-76	<76

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 respondents' 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 experiences of teacher and school support relative to normed data.

D. Relationship between Experiences of Teacher and School Support Scores and Other Parent Perceptions

Construct ^a	r =	
School Support for Parent/Caregiver Engagement	.73*	
Engagement Efficacy	.47*	
School and Community Support Services	.60*	
Overall School Experiences	.43*	
Parents/Caregivers' Experiences of Parental/Caregiver Support	.58*	

Notes. ^a 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 6 items loaded on a single latent Experienced Teacher and School Support 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 = 27.64, df = 9, p = .00; RMSEA = .037 (90% CI = .022-.053), SRMR = .02; CFI = 1.00, TLI = 1.00. The table below presents the completely standardized factor loadings and uniquenesses for each item. Squared multiple correlations averaged .60.

Ite	m	Loading	Uniqueness
1.	Students can talk to their teachers about problems that are bothering them.	.73	.47
2.	In their interactions with students, all school staff act in ways that demonstrate the character qualities the school is trying to teach.	.82	.32
3.	Teachers go out of their way to help students who need extra help.	.79	.37
4.	In this school, you can count on adults to try to make sure students are safe.	.76	.42
5.	In their interactions with students, teachers act in ways that demonstrate the character qualities the school is trying to teach.	.82	.32
6.	This school treats parents/caregivers in a way that makes them feel respected (welcomed, valued, cared about).	.72	.49

We also tested factorial invariance of the scale across language version using multigroup CFA procedures (Marsh, 1994; Vandenberg & Lance, 2000). Specifically, we first tested a baseline model with the 6 items loaded on the same latent factor across groups to test configural invariance. Next we tested for metric invariance by constraining the factor loading to be invariant across groups. This is typically considered the minimal criterion for establishing measurement invariance across groups (Marsh, 1994). Results provided support for configural and metric invariance across versions. Specifically, both models fit the data reasonably well based and there was a non-significant (p >.01) difference in the Satorra-Bentler Scaled Difference in $\chi 2$ Test (SDCS; see Brown, 2006) support the tenability of the proposed invariance constraints placed on the factor loadings.

VII. Past and Future Scale Development

Testing conducted with earlier versions of the CAYCI parent/caregiver survey established initial reliabilities for various parent/caregiver experiences subscales (e.g., experiences of value placed on parental input, academic involvement and support, parental involvement at school, and communication with parents). New data were collected in 2011 that were used to test further psychometric properties of the entire survey. The Experienced Teacher and School Support Scale was one of the new scales tested at that time.

When this scale was first tested, it included 2 additional items: "Teachers treat parents with respect" and "Parents show respect for teachers." Preliminary analyses indicated that these items did not fit well. Two further modifications were made to the scale based on expert consultation. First, the midpoint response

option (originally "undecided") was changed to "neither disagree or disagree" given that this response option seemed a more appropriate midpoint and because this response option improved the direct translation of the Spanish version. Current items also were modified to explicitly include "caregivers." In the data reflected in this report, less than 7% of the respondents were not biological parents. While this is a relatively small amount, the new wording is more inclusive and representative of how school children's families are structured. Additionally, "caregiver" is the term preferred by this population. The current recommendation is to use the 6-item measure described in this report.

Future scale development work should confirm that the psychometric properties and factorial invariance are still upheld given these two modifications. Finally, future scale development will explore the validity of the measure among parents/caregivers of secondary school students.

VII. Summary

Overall, the results of the psychometric testing indicate some support for the reliability and validity of the Experienced Teacher and School Support scale with parents/caregivers of elementary school students. Testing also revealed that the English and Spanish language version of the scale demonstrated a minimum level of factorial invariance suggesting that the scale scores can reasonably be compared. Having information about how parents/caregivers perceive the supports available from the teachers and the school may help to inform school improvement efforts, as parents/caregivers are a key partner in students' education.

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.

Brown, T.A. (2006). Confirmatory factor analysis for applied research. New York: Guilford Press.

Eccles, J. S. (2004). Schools, academic motivation, and stage-environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 125–154). Hoboken: John Wiley.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, & practice* (2nd ed.). New York: Teachers College.

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.

Hudley, C., & Daoud, A. M. (2007). High school students' engagement in school: Understanding the relationships to school context and student expectations. In F. Salili & R. Hoosain (Eds.), *Culture, motivation and learning: A multicultural perspective* (pp. 367–391). Charlotte: Information Age.

Marsh, H.W. (1994). Confirmatory factor analysis models of factorial invariance: A multifaceted approach. *Structural Equation Modeling*, 1, 5-34.

Mashburn, A. J. & Pianta, R. C. (2006). Social relationships and school readiness. *Early Education and Development*, 17, 151–176

IX. Recommended Citation of Scale

When using the Experiences of Teacher and School Support 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: Experiences of Teacher and School Support scale*. 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. (2012). *Community and Youth Collaborative Institute School Experience Surveys*. Columbus, OH: College of Social Work, The Ohio State University.