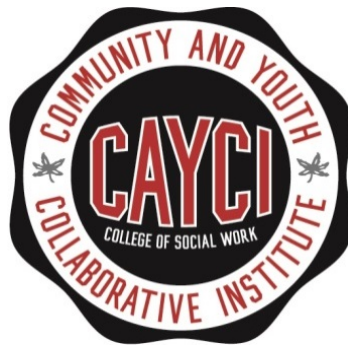


Community and Youth Collaborative Institute
School Experience Surveys



Technical Report: Engagement Efficacy
Parent Version

Produced By:

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THE OHIO STATE UNIVERSITY
COLLEGE OF SOCIAL WORK

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ENGAGEMENT EFFICACY

Parent Version

I. Definition of Construct

The *Engagement Efficacy* scale explores the degree to which parents/caregivers feel confident that they can be involved in their children's education and school activities.

II. Relevance for Practice

Parent/caregiver involvement in education has been associated with a variety of positive academic outcomes, including higher grade-point averages, lower dropout rates, fewer retentions, and fewer inappropriate special education placements (Gutman & Midgley, 2000; Miedel & Reynolds, 1999; Rumberger, 1995). Positive behavioral outcomes associated with parent/caregiver involvement include increased ability to self-regulate behavior and higher levels of social skills (Brody, Flor, & Gibson, 1999; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004). Understanding the degree to which parents feel as though they are able to be involved in their children's education and school activities will help schools make more informed decisions when developing parent/family engagement strategies and opportunities.

III. Scale Description and Instructions

A. Items

1. I have enough time and energy to supervise my child's homework.
2. I have enough time and energy to attend special events at the school.
3. I have enough time and energy to communicate effectively with my child's teacher(s).

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 own involvement with your children's school. For each statement, please fill in the ONE circle that best represents your answer.

D. Instructions for Scale Administrators

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 3 items should be calculated and used as an indicator of parents'/caregivers' engagement efficacy, with higher scores indicating greater levels of efficacy.

V. Psychometric Properties of the Scale

A. Description of Sample

Participants used to test the psychometric properties of the scale included 1,409 parents or caregivers of elementary school students from around the state of Utah. This included 1,099 mothers, 219 fathers, 22 grandmothers, 6 grandfathers, 10 legal guardians (not parents), 1 foster parent, and 12 others. The majority of respondents indicated having obtained at least a high school diploma. More specifically, 42.2 percent had earned a high school diploma as their highest levels of education, 19.2 percent an associate's degree, 15.1 percent a bachelor's degree, 2.4 percent a master's degree, and 0.9 percent doctoral degree. The remaining 16.5 percent indicated that they had not completed high school. The respondents identified themselves as White/Non-Hispanic (46.6%), Latino/Latina (42.1%), Mixed/Multi-Racial (4.7%), African American (1.6%), or Asian (1.1%). 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 ($N = 1409$)	4.06	.72	1-5	.74
Gender				
Males ($n = 283$)	4.02	.67	1.7-5	.69
Females ($n = 1089$)	4.07	.73	1-5	.76
Education Level				
Less than High School ($n = 233$)	4.05	.77	1-5	.77
High School Degree ($n = 594$)	4.05	.70	1-5	.74
Post-Secondary Degree ($n = 582$)	4.06	.72	1-5	.73
Race/Ethnicity				
White/Non-Hispanic ($n = 657$)	3.99	.74	1-5	.76
Latino/Latina ($n=593$)	4.17	.68	1-5	.73
Other ($n = 159$)	3.90	.72	2-5	.69
Language Version				
English ($n= 928$)	3.98	.73	1-5	.74
Spanish ($n= 481$)	4.22	.67	1-5	.74

Note. Group specific data omits respondents who did not indicate their status. Analyses indicated significant group differences ($p < .01$) based on race/ethnicity and language version of the scale, whereas 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

Percentages		Classification of Scores		
Maximum Value	$\frac{1}{2}$ SD	Excelling	Emerging	Needs Improvement
81.2%	7.2%	88+	88-74	<74

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 $\frac{1}{2}$ SD percentage. Based on these cut points, schools may determine where they stand on parents'/caregivers' experiences of engagement efficacy relative to normed data

D. Relationship between Engagement Efficacy Scores and Other Parent/Caregiver Perception Constructs

Construct ^a	<i>r</i> =
School Support for Parent/Caregiver Engagement	.51*
School and Community Support Services for Parent/Caregiver	.47*
Overall School Experiences	.20*
Parent/Caregivers' Experience of Teacher and School Support	.47*
Parent/Caregivers' Experience of Parent/Caregiver Support	.42*

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 conducted 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 Engagement Efficacy 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 .49.

Item	Loading	Uniqueness
1. I have enough time and energy to supervise my child's homework.	.69	.53
2. I have enough time and energy to attend special events at the school.	.68	.54
3. I have enough time and energy to communicate effectively with my child's teacher(s).	.74	.45

We also tested factorial invariance of the scale across language versions using multigroup CFA procedures (Marsh, 1994; Vandenberg & Lance, 2000). Specifically, we first tested a baseline model with the 3 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 χ^2 Test (SDCS; see Brown, 2006), supporting the tenability of the proposed invariance constraints placed on the factor loadings.

VII. Past and Future Scale Development

Earlier versions of the CAYCI parent/caregiver survey established initial reliabilities for various parent 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 Engagement Efficacy Scale was one of the new scales tested at that time.

When this scale was first tested, initial testing included 2 additional items: “I have enough time and energy to supervise my child's homework” and “I have enough time and energy to help out at the school.” 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 3-item version of the measure as described in this report. One further

modification was made to the scale based on expert consultation. Specifically, the midpoint response option (originally “undecided”) has been changed to “neither disagree or agree” given that this response option seemed a more appropriate midpoint and because this response option improved the direct translation of the Spanish version. Future scale development work should confirm that the psychometric properties and factorial invariance are still upheld given this slight modification.

We also suggest that future work explore the validity of the measure using parents/caregivers of secondary school students. Finally, future scale development work may consider adding additional items to attempt to capture a greater breath of situations impacting feelings of engagement efficacy.

VII. Summary

Overall, the results of the psychometric testing indicate initial support for the reliability and validity of the *Engagement Efficacy* 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. Parent/caregiver involvement in education has been associated with a variety of positive academic and behavioral outcomes such as increased ability to self-regulate behavior, higher levels of social skills, and ultimately better grades and higher rates of school retention (Brody, Flor, & Gibson, 1999; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004).

VIII. References

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IX. Recommended Citation of Scale

When using the *Engagement Efficacy 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: Engagement Efficacy 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. (2013). Community and Youth Collaborative Institute School Experience Surveys. Columbus, OH: College of Social Work, The Ohio State University.