

# APPENDIX C. MEASURING SELF-REGULATION AND CO-REGULATION

As part of the *Innovate* phase, the SARHM team adapted existing measures and created new measures to design a set of tools to assess educator knowledge of self- and co-regulation, use of the co-regulation strategies, and feedback from educators and youth. We used these measures to collect data for the formative RCE, and conducted a separate pilot test of their feasibility and reliability. As a first step, under the *Learn* phase, the team conducted a review of existing measures of self-regulation and co-regulation suitable for use in the formative RCE.

This appendix describes the methods and findings from the measures review. It includes a description of the measures developed for use in the formative RCE and summarizes results from a pilot test of the measures in three other HMRE programs. At the end of the appendix, two summary tables provide detailed descriptions of the self-regulation and co-regulation measures we identified, including the domains and skills they cover, administration details, target population, reliability, use in similar studies, and cost and rules for adaptation.

## THE MEASURES REVIEW YIELDED SELF- AND CO-REGULATION MEASURES FOR THE FORMATIVE RCE

We conducted a targeted literature review of existing studies and interventions aimed at promoting adolescents' and young adults' self-regulation skills, as well as published compendia that included measures of self- and co-regulation. Specifically, we reviewed the following sources:

- Studies included in OPRE's Self-Regulation and Toxic Stress Series (Murray et al. 2016a)
- Studies of HMRE programs and outcomes, including OPRE's Healthy Marriage/Relationship Education—Models and Measures (3M) project (Scott et al. 2015) and OPRE's Youth Education and Relationship Services (YEARS) project (Scott et al. 2017)
- Studies of academic and job readiness interventions, including OPRE's Goal-Oriented Adult Learning in Self-Sufficiency (GOALS) project (Cavadel et al. 2017), OPRE's Evaluation of Employment Coaching for TANF and Other Low-Income Populations (Kautz and Moore 2018), and the Middle Grades Longitudinal Study run by the National Center for Education Statistics (Malone et al. 2013)
- Studies on the importance of interpersonal relationships for adolescents, including the Office of Adolescent Health's Positive Connections for Supportive People research review (Office of Adolescent Health 2016)

- Measures compendia on self-regulation, including Child Trends' Youth Development Outcomes Compendia (Hair et al. 2001) and the Forum for Youth Investments' Soft Skills Compendium (Wilson-Ahlstrom et al. 2011)

When we did not find measures of a domain or skill after reviewing these sources, we reached out to other Mathematica and Public Strategies experts and the expert panel to solicit additional recommendations.

Because co-regulation has rarely been studied with adolescents and young adults, we took an additional step to identify co-regulation measures by conducting a literature search in two databases, PsycINFO and ERIC. The parameters for the search were similar to those used for literature review described in Chapter III and Appendix A. The search included terms related to interventions, self- and co-regulation, adolescents and young adults, and adults who may support youth and young adults' development. In order to capture publications that were not included in the Self-Regulation and Toxic Stress Series, we limited the search to documents published between 2013 and 2017. We also captured relevant citations when screening articles for the literature review ("Group E" described on p. 103). Using these strategies, we identified 557 potential measures of adolescent and young adult self-regulation and 38 potential measures of adult co-regulation.

## MEASURES REVIEW INCLUSION CRITERIA

We used the following criteria to assess whether the initial set of identified measures were relevant to the project and appropriate for further review:

- **Measures capture one or more of the domains and skills listed in our theoretical model of self-regulation and co-regulation in the context of HMRE programs for youth.** These domains, depicted in Figure III.1, include behavioral, emotional, and cognitive regulation (for self-regulation) and relationships, environment, and skills coaching (for adult co-regulation).
- **Measures are feasible to implement in an HMRE program setting.** HMRE program staff do not typically interact with youth outside of a workshop; we excluded measures that required observations outside of a group workshop.
- **Measures are appropriate for the target population of the project.** Measures could be used with adolescents and young adults ages 14 to 24 or HMRE program educators.

Once we screened measures according to the first three criteria, we assessed the remaining measures on two dimensions:

- **Measures demonstrate psychometric properties that indicate they have adequately captured the construct of interest in prior studies.** For instances where there were multiple measures for similar self-regulation constructs, we rank-ordered and selected the most valid measures. Statistical tests showed that the items in these measures were consistently correlated with each other when answered multiple times. These results, expressed with a Cronbach's alpha ( $\alpha$ ) score, indicated they were reliably

measuring a single construct. Generally, these measures had an  $\alpha$  above .7, which is widely viewed as adequate. We did not perform this step for co-regulation measures because we identified only a small number of measures. However, co-regulation measures with reported psychometric properties also demonstrated adequate reliability.

- **Measures align with the training approaches and skills targeted by the formative RCE.** We selected the measures that were relevant to the strategies that the programs selected to pilot test, as described in Chapter V.

## ELEVEN MEASURES OF ADOLESCENT AND YOUNG ADULT SELF-REGULATION MET INCLUSION CRITERIA

Of the 557 self-regulation measures identified in the initial search, we dropped 495 because they did not meet the first three criteria of the scan. Application of the first criterion led to the exclusion of 120 potential measures because they did not measure the skills listed in our theoretical model. Five potential measures were dropped because they were not feasible for use in an HMRE setting. Most of the potential measures, 370, were not appropriate for the target population.

After sorting the remaining 62 potential self-regulation measures by domain and reliability, we selected 11 that had the strongest reliability—in other words, the highest  $\alpha$ —and were best aligned with the formative RCE (Appendix Table C.1).

**Appendix Table C.1. Crosswalk of recommended self-regulation measures and domains**

Measure	Emotion regulation	Cognitive regulation	Behavior regulation
<b>Behavior Rating Inventory of Executive Function—Adult Version (Roth et al. 2005)</b>	✓	✓	✓
<b>Difficulties in Emotional Regulation Scale (Gratz and Roemer 2004)</b>	✓	✓	✓
<b>Interpersonal Reactivity Index (Davis 1980)</b>	✓	✓	
<b>Empathy Scale—Flourishing Children Project (Lippman et al. 2014)</b>	✓		
<b>Mindfulness Attention and Awareness Scale (Brown and Ryan 2003)</b>	✓		
<b>Goal Orientation Scale—Flourishing Children Project (Lippman et al. 2014)</b>		✓	
<b>Social Problem-Solving Inventory—Revised (Wakeling 2007)</b>		✓	

Measure	Emotion regulation	Cognitive regulation	Behavior regulation
Conflict Tactics Scale (Feldman and Gowen 1998)			✓
Delaying Gratification Inventory (Hoerger et al. 2011)			✓
Grit Scale (Duckworth et al. 2007)			✓
Communication Scale—Children, Youth, and Families at Risk (Barkman and Machtmes 2002)			✓

## NINE MEASURES OF ADULT CO-REGULATION MEASURES MET INCLUSION CRITERIA

Because our search yielded far fewer measures of co-regulation than self-regulation, we selected measures for further review if they met at least the first, second, and third criteria. Of the 38 potential measures that we identified in our initial search, we dropped 27 because they did not capture the co-regulation skills listed in our theoretical model. Seven measures were not feasible to implement in an HMRE program setting; therefore, we dropped them. Since we identified so few measures of co-regulation, we kept measures if they could be adapted to fit our target population. For example, we reviewed several measures that were designed to assess adolescents' or young adults' interactions with their parents. We opted to include these measures in our review if they contained items that could easily be adapted to assess interactions between youth and HMRE educators. However, we dropped eight more measures because even with minor adaptations, they would not be appropriate for 14- to 24-year-olds or educators. Ultimately, we selected nine measures best suited for the formative RCE (Appendix Table C.2).

**Appendix Table C.2. Crosswalk of recommended co-regulation measures and domains**

Measure	Warm, responsive relationships	Coaching	Structuring the environment
Youth Program Self-Assessment (Borden 2015)	✓	✓	✓
Delaware School Climate Scale, Teacher/Staff Version (Bear et al. 2016)	✓		✓
ED School Climate Survey, student and teacher versions (U.S. Department of Education 2018)	✓	✓	✓
Classroom Assessment Scoring System—Secondary School Version (Pianta et al. 2012)	✓		✓

<b>Inventory of Parent and Peer Attachment (Armsden and Greenberg 1987)</b>	✓		
<b>Youth–Mentor Relationship Questionnaire (Rhodes et al. 2005)</b>	✓		
<b>Parenting Scale for Adolescents (Irvine et al. 1999)</b>	✓	✓	✓
<b>Socio-Emotional Guidance Questionnaire (Jacobs et al. 2013)</b>		✓	
<b>Teacher Sense of Efficacy Scale (Tshannen-Moran and Hoy 2001)</b>			✓

ED = U.S. Department of Education.

## MEASURES ASSESSED EDUCATOR KNOWLEDGE, USE OF STRATEGIES, AND YOUTH PERCEPTIONS

Taken together, the measures we identified cover a range of skills related to youth self-regulation and adult co-regulation. We adapted a subset of the measures to assess the specific knowledge and skills that most closely aligned with the training approaches and resources tested in the formative RCE. Even though many of the measures included in our review reported adequate reliability, few of them have been used with diverse populations of youth or educators in the context of HMRE or other youth development programs. This is especially true of the measures of co-regulation, which were mostly developed for teachers and parents, rather than educators who facilitate youth programs. We also developed new items and measures where none existed to assess important constructs. Specifically, the items and measures created by the SARHM team included a staff interview protocol, a session assessment form, and a group session observation tool.

In total, we incorporated these measures into six data collection instruments that we developed to support the formative RCE. Appendix Table C.3 describes the measures adapted to create each instrument, when the instrument was to be administered, the type of respondents, and the estimated length. Two of the six instruments adapted measures identified in the scan; four were developed by the SARHM team. We administered them on a schedule that aligned with each program’s three planned learning cycles (sequential four-week cycles at Children’s Harbor, and at MTCI, an eight-week cycle followed by two simultaneous eight-week cycles and a four-day intensive camp):

- **Educator questionnaire:** Before and after initial training on youth self-regulation and the co-regulation strategies, educators completed a self-assessment of their knowledge of self-regulation and co-regulation, their own self-regulation skills, their use of co-regulation strategies, and the extent to which the HMRE program climate supported youth self-regulation.

- **Semistructured interview protocol:** At the end of each learning cycle in Children’s Harbor and during the second and third cycles in MTCL, we interviewed educators and program leaders to document their experiences and perspectives about using the co-regulation strategies during program activities.
- **Session assessment form:** Educators completed these forms roughly once a week to report frequency and ease of use of the co-regulation strategies during group workshops and individual meetings with youth. Educators also rated their own performance and comfort using the strategies.
- **Group session observation tool:** SARHM team members and trained supervisors used this tool to assess educators’ use of co-regulation strategies and youth engagement during group sessions in all three learning cycles. Using time sampling in 15-minute increments, observers documented use of the co-regulation strategies and quality of the workshop session. The observers also documented any disruptions that occurred during the session, including the type and length of the disruption and the educators’ response.
- **Youth questionnaire:** Administered to youth who participated in focus groups, this questionnaire obtained information about the youth’s knowledge of self-regulation, a self-assessment of skills gained from the program, and youth’s perceptions of educators’ behaviors and the program climate.
- **Youth focus group protocol:** We developed the youth focus group protocol to gather information about youth’s perceptions of their own knowledge and skill gains during the program, including healthy relationship and self-regulation skills. We also asked about their satisfaction with the HMRE program services and their interactions with program educators. Questions were designed to elicit youth feedback about educators’ use of co-regulation strategies.

**Appendix Table C.3. Data collection instruments for the formative RCE**

Instrument	Measures adapted for the tool	Timing of administration	Respondents	Length
<b>Educator questionnaire</b>	Delaware School Climate Scale, Teacher/Staff Version, Goal Orientation Scale—Flourishing Children Project, Socio-Emotional Guidance Questionnaire, Teacher Sense of Efficacy Scale, Parenting Scale for Adolescents, ED School Climate Survey, Youth Program Self-Assessment	Before the initial SARHM training and at the end of the first learning cycle	Educators	15 minutes
<b>Semi-structured interview protocol</b>	Developed by the SARHM team	Children’s Harbor completed at the end of second and third cycles, MTCI completed two sets during Cycle 2/3	Educators and program leaders	20 minutes
<b>Session assessment form</b>	Developed by the SARHM team	Children’s Harbor completed after each workshop, MTCI completed once per week	Educators	10 minutes
<b>Group session observation tool</b>	Developed by the SARHM team	Completed during workshops	Observers	40–90 minutes, depending on workshop length
<b>Youth questionnaire</b>	Difficulties in Emotional Regulation Scale, Interpersonal Reactivity Index, Conflict Tactics Scale, Goal Orientation Scale—Flourishing Children Project, Inventory of Parent and Peer Attachment, Youth-Mentor Relationship Questionnaire, ED School Climate Survey	During the third cycle, before participating in a focus group (only at Children’s Harbor)	Youth	15 minutes
<b>Youth focus group protocol</b>	Developed by the SARHM team	Conducted at the end of the third cycle at Children’s Harbor	Youth	60 minutes

ED = U.S. Department of Education.

## A PILOT OF CO-REGULATION MEASURES TO ASSESS FEASIBILITY AND RELIABILITY

In addition to the formative RCE, which is the primary focus of Chapters V and VI of this report, we conducted a separate pilot test of co-regulation measures we developed for SARHM. For this measures pilot, we revised three of the formative RCE measures that assess educators' self-regulation and co-regulation skills: the educator questionnaire, the session assessment form, and the group session observation tool. Three youth-serving HMRE programs that did not participate in the formative RCE participated in the pilot of these measures.

The goal of the measures pilot test was to take an initial step in testing the feasibility and reliability of newly developed measures of co-regulation. Although we originally developed the measures as part of the RCE, a key objective of the measures pilot was to broaden the potential use of the co-regulation measures by adapting them for use in HMRE programs, regardless of whether staff had received co-regulation training. By doing so, we were able to assess whether the measures could be valid and reliable indicators of how well educators co-regulate during the HMRE workshops.

The pilot test showed that the co-regulation measures were feasible in an HMRE setting. HMRE program educators and observers perceived the measures as useful, and observers were able to use the group workshop observation measure to document co-regulation behaviors. The results of the pilot also pointed to some future adaptations and areas for exploration. For example, there was variation between how often educators reported using co-regulation supports and how often they were observed engaging in those behaviors. Also, psychometric testing suggested that item-level changes to the educator questionnaire and session assessment form were warranted, and observer feedback suggested changes to the workshop observation form. (Reliability scores for the measures are not publicly available due to Paperwork Reduction Act requirements.) Additional information about the measures pilot will be presented in an upcoming publication (Alamillo et al, 2020).



**Appendix Table C.4. Self-Regulation Measures Selected for Further Review**

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Behavior Rating Inventory of Executive Function—Adult Version (Roth et al. 2005)</b>	<p>Behavior regulation</p> <p>Organization of time and materials</p> <p>Persistence in the face of emotional arousal</p> <p>Emotional regulation</p> <p>Labeling, managing, and expressing feelings</p> <p>Cognitive regulation</p> <p>Cognitive flexibility</p> <p>Executive functioning</p>	<p>75-item, self- or observer-report questionnaire to assess executive function</p> <p>Consists of nine factors: (1) inhibition of impulses, (2) cognitive flexibility in problem solving and shifting between tasks, (3) emotional control, (4) self-monitoring when interacting with others, (5) initiation of new tasks, (6) working memory, (7) planning and organization of time, (8) completing tasks carefully, and (9) organization of materials</p>	<p>Developed for adults (18 and over), but most items are also appropriate for adolescents</p>	<p>Alpha (factors, self-report) = 0.73–0.90 (composite, self-report) = 0.96</p> <p>Test-retest (factors, self-report) = 0.82–0.92</p> <p>Test-retest (composite, self-report) = 0.94</p>	<p>Descriptive study of the relationship between young adult executive function and procrastination (Rabin et al. 2011)</p>	<p>\$297.00 for manual and materials for assessing 25 individuals</p> <p>No rules for adaptation</p>
<b>Difficulties in Emotion Regulation Scale (Gratz and Roemer 2004)</b>	<p>Emotional regulation</p> <p>Mindfulness</p> <p>Labeling, expressing, and managing feelings</p> <p>Self-calming strategies</p> <p>Cognitive regulation</p> <p>Executive functioning</p> <p>Behavior regulation</p> <p>Persistence in the face of emotional arousal</p>	<p>36-item self-report questionnaire to assess self-awareness about emotion and self-efficacy in regulating emotion</p> <p>Consists of six factors: (1) non-acceptance of emotional responses, (2) difficulties engaging in goal-directed behavior, (3) impulse control difficulties, (4) lack of emotional awareness, (5) limited access to emotion regulation strategies, and (6) lack of emotional clarity</p>	<p>Developed for adults (18 and over), but most items are also appropriate for adolescents</p>	<p>Alpha (factors, self-report) = 0.80–0.89</p> <p>Alpha (composite, self-report) = 0.93</p>	<p>Evaluation of acceptance-based emotion regulation intervention (Gratz and Gunderson 2006)</p> <p>Descriptive study on links between emotion regulation and anxiety (Roemer et al. 2009)</p>	<p>Free</p> <p>No rules for adaptation</p>

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Interpersonal Reactivity Index (Davis 1980)</b>	Emotional regulation Empathy and compassion Cognitive restructuring /reframing Cognitive regulation Perspective taking	28-item self-report questionnaire to assess empathy  Consists of 4 subscales: (1) perspective taking, (2) fantasy, (3) empathetic concern, and (4) personal distress	Appropriate for adults and adolescents	Alpha (factors, self-report) = 0.70–0.84	Evaluation of intervention that teaches empathy (Hatcher et al. 1994)	Free  No rules for adaptation
<b>Empathy Scale—Flourishing Children Project (Lippman et al. 2014)</b>	Emotional regulation Empathy and compassion	4-item self-report questionnaire to assess ability to understand what someone else is feeling  Consists of a single scale	Developed for adolescents but most items are appropriate for adults	Alpha (composite, self-report) = 0.84	Scan and review of youth measurement tools (Olenik et al. 2013)	Free  No rules for adaptation
<b>Mindfulness Attention and Awareness Scale (Brown and Ryan 2003)</b>	Emotional regulation Mindfulness	15-item self-report questionnaire to assess mindfulness  Consists of a single scale	Developed for adults (18 and over), but most items are also appropriate for adolescents	Alpha (composite, self-report) = 0.80–0.90  Test-retest (composite, self-report) = 0.81	Evaluation of intervention that provides contemplative training (McGarrigle and Walsh 2011)  Evaluation of intervention that teaches mindful parenting (Van der Oord et al. 2012)	Free  No rules for adaptation

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Goal Orientation Scale—Flourishing Children Project (Lippman et al. 2014)</b>	Cognitive regulation Goal setting (short- and long-term)	7-item self- or parent-report questionnaire to assess motivation and ability to make viable plans and to take action toward achieving them  Consists of a single scale	Developed for adolescents, but most items are also appropriate for adults	Alpha (composite, self-report) = 0.88	Scan and review of youth measurement tools (Olenik et al. 2013)	Free No rules for adaptation
<b>Social Problem-Solving Inventory-Revised (Wakeling 2007)</b>	Cognitive regulation Problem solving Decision making	52-item self-report long form or 25-item self-report short form to assess problem-solving skills  Consists of five factors: (1) positive problem orientation, (2) negative problem orientation, (3) rational problem solving, (4) impulsivity/carelessness style, and (5) avoidance style	Appropriate for adolescents and adults (13 and older)	Alpha (factor, self-report, short-form) = 0.74–0.85  Test-retest (factor, self-report, short-form) = 0.72–0.79	Psychometric validation for use among young adults (Hawkins et al. 2009)  Descriptive study of effects of prenatal conditions on adolescent problem solving (McGee et al. 2009)  Evaluation of problem-solving therapy (Bell and D’Zurilla 2009)	\$188.00 for manual and materials for assessing 25 individuals  No rules for adaptation
<b>Conflict Tactics Scale (Feldman and Gowen 1998)</b>	Behavior regulation Conflict resolution Healthy behavioral coping Prosocial or cooperative and compassionate communication	29-item self-report questionnaire to assess response to conflict with a romantic partner  Consists of six factors: (1) avoidance, (2) compromise, (3) distraction, (4) overt anger, (5) seeking social support, and (6) violence	Appropriate for adolescents and young adults (14–19), although items also appropriate for older adults	Alpha (avoidance, compromise, overt anger, and violence) = 0.67–0.84	STREAMS Evaluation (Wood et al. 2018)  Evaluation of intervention to reduce domestic violence (Dunford 2000)	Free No rules for adaptation

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Delaying Gratification Inventory (Hoerger et al. 2011)</b>	Behavior regulation Delaying gratification	35-item self-report long form or 10-item self-report short form to assess delay of gratification  Consists of five factors of delaying gratification: (1) food, (2) physical, (3) social, (4) money, and (5) achievement	Developed for adults (18 and over), although most items also appropriate for adolescents	Alpha (factors, self-report) = 0.71–0.89  Alpha (composite, self-report, long form) = 0.91  Alpha (composite, self-report, short form) = 0.79	Descriptive study of links between experiential avoidance and delay of gratification (Gerhart et al. 2013)  Experimental study of paternal disengagement indicators on sexual decision making (DelPriore and Hill 2013)	Free  No rules for adaptation
<b>Grit Scale (Duckworth et al. 2007)</b>	Behavior regulation Persistence in the face of emotional arousal	12-item self-report long form or 8-item self-report short form to assess persistence  Consists of two factors: (1) consistency of interest and (2) perseverance of effort	Appropriate for adolescents and adults (13 and older)	Alpha (factors, self-report, long form) = 0.74–0.84  Alpha (composite, self-report, long form) = 0.77–0.85  Alpha (factors, self-report, short form) = 0.60–0.79  Alpha (composite, self-report, short form) = 0.73–0.83	Evaluation of charter schools (Dobbie and Fryer 2015)  Descriptive study of relationship between self-control and grit (Duckworth and Gross 2014)	Cost unknown – Free to use for non-commercial purposes, but permission must be granted for commercial use  No rules for adaptation

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Communication Scale— Children, Youth, and Families at Risk (Barkman and Machtmes 2002)</b>	Behavior regulation  Prosocial or cooperative and compassionate communication	23-item self-report questionnaire to assess ability to communicate  Consists of a single scale	Developed for adolescents (12–18), but most items are also appropriate for adults	Alpha (composite, self-report) = 0.79	Use in 4-H programs (Duerden et al. 2012)	Free  No rules for adaptation

**Appendix Table C.5. Co-Regulation Measures Selected for Further Review**

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Youth Program Self-Assessment (Borden 2015)</b>	<p><b>Warm, responsive relationships</b></p> <p>Responding with warmth</p> <p><b>Coaching self-regulation skills</b></p> <p>Supporting long-term goal setting</p> <p>Coaching problem-solving and decision-making skills</p> <p><b>Structuring the environment</b></p> <p>Engineering positive group norms</p> <p>Creating a safe and positive climate</p> <p>Maintaining clear rules</p> <p>Providing environmental prompts to reinforce skills</p>	<p>24-item, self-report questionnaire for program staff to measure features of successful youth development programs</p> <p>Measures eight program dimensions: (1) physical and psychological safety, (2) appropriate structure, (3) supportive relationships, (4) opportunities to belong, (5) positive social norms, (6) support for efficacy and mattering, (7) opportunities for skill building, and (8) integration of family, school, and community efforts</p>	Programs for adolescents and young adults	Unknown	None	Free No rules for adaptation
<b>Delaware School Climate Survey, student and teacher versions (Bear et al. 2016)</b>	<p><b>Warm, responsive relationships</b></p> <p>Responding with warmth</p> <p>Validating and offering support</p> <p>Allowing youth to make decisions</p> <p><b>Structuring the environment</b></p>	<p>Consists of seven subscales: (1) teacher-student relations, (2) student relations, (3) teacher-home communication, (4) clarity of expectations, (5) fairness of rules, (6) school safety, (7) schoolwide student engagement</p>	Students and teachers in grades 3–12	<p>Alpha (student version) = .77–.88</p> <p>Alpha (teacher version) = .88–.91</p>	Measures of Effective Teaching Study (Kane et al. 2012)	Free No rules for adaptation

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
	<p>Engineering positive peer relationships</p> <p>Maintaining clear rules</p> <p>Providing environmental prompts to reinforce skills</p>					
<b>CLASS–Secondary (Pianta and Hamre 2012)</b>	<p><b>Warm, responsive relationships</b></p> <p>Responding with warmth</p> <p>Validating and offering support</p> <p>Allowing youth to make decisions</p> <p><b>Structuring the environment</b></p> <p>Engineering positive group norms</p> <p>Maintaining clear rules</p> <p>Monitoring opportunities for risk taking</p>	<p>Observational tool to measure the quality of classroom instruction</p> <p>Trained observers assess 15-minute segments of instruction (either in person or by video); repeat 2–4 times in a single observation</p> <p>Consists of 12 dimensions: (1) positive climate, (2) teacher sensitivity, (3) regard for adolescent perspectives, (4) behavior management, (5) productivity, (6) negative climate, (7) instructional learning formats, (8) content understanding, (9) analysis and inquiry, (10) quality of feedback, (11) instructional dialogue, and (12) student engagement These dimensions fall under 3 domains: (1) emotional support, (2) classroom organization, and (3) instructional support</p>	7th- through 12th-grade classrooms	Inter-rater reliability = .73–.95	<p>Secondary MyTeachingPartner Study (Allen et al. 2011)</p> <p>Measures of Effective Teaching Study (Kane et al. 2012)</p>	<p>Certification on the tool costs several hundred dollars</p> <p>Scoring manual costs \$55</p>

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Inventory of Parent and Peer Attachment (Armsden and Greenberg 1987)</b>	<p><b>Warm, responsive relationships</b></p> <ul style="list-style-type: none"> <li>Responding with warmth</li> <li>Validating and offering support</li> <li>Allowing youth to make decisions</li> <li>Encouraging compassion for self and others</li> </ul>	<p>53-item, youth self-report questionnaire to assess attachment to parents and peers.</p> <p>For each relationship (parents and peers), three dimensions are assessed: (1) mutual trust, (2) communication, and (3) anger and alienation</p>	Adolescents ages 12–20	<p>Alpha = .87–.92</p> <p>Test-retest = .86–.93</p>	<p>Evaluation of the Big Brothers, Big Sisters program (Chan et al. 2013)</p> <p>4-H Positive Youth Development study (Lerner et al. 2005)</p>	<p>Free</p> <p>No rules for adaptation</p>
<b>Socio-Emotional Guidance Questionnaire (Jacobs et al. 2013)</b>	<p><b>Coaching and modeling skills</b></p> <ul style="list-style-type: none"> <li>Teaching strategies to manage distress</li> <li>Encouraging help-seeking behavior</li> <li>Coaching problem solving</li> <li>Coaching labeling and awareness of emotions</li> <li>Encouraging healthy decision making</li> </ul>	<p>57-item, teacher self-report questionnaire to assess socioemotional guidance activities in schools</p> <p>Consists of 3 domains: (1) coordination and organization of the school, (2) support of teachers at the school, and (3) guidance by teachers</p>	Teachers in grades 7–12	Alpha = .70–.81	None	<p>Free</p> <p>No rules for adaptation</p>
<b>Teacher Sense of Efficacy Scale (Tshannen-Moran and Hoy 2001)</b>	<p><b>Structuring the environment</b></p> <ul style="list-style-type: none"> <li>Engineering positive peer interactions</li> <li>Creating a safe and positive climate</li> <li>Maintaining clear rules</li> <li>Providing space and time to calm down</li> </ul>	<p>24-item, teacher self-report questionnaire to assess teachers' feelings about their ability to manage student behavior in the classroom (short form has 12 items)</p> <p>Consists of three subscales: (1) efficacy for instructional strategies, (2) efficacy</p>	Teachers in preschool through high school	Alpha = .87–.91	Study of longitudinal development of teacher efficacy (Hoy and Spero 2005)	<p>Free</p> <p>No rules for adaptation</p>



Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
	Providing environmental prompts to reinforce skills	for classroom management, and (3) efficacy for student engagement				
<b>Teacher Response Survey (Gottesman 2016)</b>	<p><b>Warm, responsive relationships</b></p> <ul style="list-style-type: none"> <li>Responding with warmth</li> <li>Validating and offering support</li> <li>Allowing youth to make decisions</li> </ul> <p><b>Coaching self-regulation skills</b></p> <ul style="list-style-type: none"> <li>Teaching strategies to manage distress</li> <li>Encouraging help-seeking behavior</li> <li>Practicing interpersonal communication skills</li> </ul> <p><b>Structuring the environment</b></p> <ul style="list-style-type: none"> <li>Engineering norms to promote a safe, positive climate</li> <li>Maintaining clear rules</li> <li>Monitoring opportunities for risk taking</li> <li>Providing space and time to calm down</li> </ul>	<p>Self-report questionnaire for teachers consisting of two vignettes followed by 12 survey items</p> <p>Items assess teachers' probable responses to students' behavior, beliefs about the impact of their responses on students' behavior, and their responsibility to help students learn how to manage their emotions</p>	Teachers in preschool through high school	Unknown	Evaluation of an emotional regulation professional development program (Gottesman 2016)	Free No rules for adaptation

Measure Name and Authors	Domains and Skills	Summary of Measure (Length, Respondent, Purpose, Mode, Subscales)	Target Population	Reliability	Use in Studies with Similar Populations	Cost and Rules for Adaptation
<b>Parenting Scale for Adolescents (Irvine et al. 1999a)</b>	<p><b>Warm, responsive relationships</b></p> <p>Avoiding harsh, shaming remarks</p> <p>Encouraging compassion for self and others</p> <p><b>Coaching self-regulation skills</b></p> <p>Teaching strategies to manage distress</p> <p>Practicing interpersonal communication skills</p> <p><b>Structuring the environment</b></p> <p>Engineering norms to promote a safe, positive climate</p> <p>Maintaining clear rules</p> <p>Monitoring opportunities for risk taking</p> <p>Providing space and time to calm down</p> <p>Providing prompts to reinforce skill use</p>	<p>13-item, self-report scale for parents to measure parents' discipline practices</p> <p>Contains two subscales: (1) overreactivity and (2) laxness</p>	Parents of middle school children	Alpha = .82-.84	Evaluation of the Adolescent Transitions Program (Irvine et al. 1999b)	Free No rules for adaptation