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## Adapting Social Emotional Learning Curricula for an Urban Context via Focus Groups: Process and Outcomes

Kathryn Doherty Kurtz<sup>a</sup>, Melissa Pearrow<sup>a</sup>, Jill Snyder Battal<sup>b</sup>, Melissa A. Collier-Meek<sup>a</sup> , Jillian Archer Cohen<sup>b</sup>, and Whitney Walker<sup>b</sup> 

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### ABSTRACT

Although internalizing problems are of particular concern in under-resourced urban schools, interventions are often not culturally relevant for this student population. The current study explored a process of seeking stakeholder input through focus groups to inform the cultural adaptation of Merrell's Strong Kids curricula, an intervention targeting internalizing problems. Focus group feedback revealed themes related to the importance of increasing the relevance of the curricula to better address the community context (addressing anxiety associated with the political climate and capitalizing on community strengths) and better supporting students' needs (building in more communication with caregivers, developing skills stakeholders wanted students to learn, addressing concerns they had about their students' feelings and experiences, and the need for building in strategies to help students generalize and adapt skills across settings). The adapted intervention was then implemented with a sample of 43 elementary student participants. Pre/post differences in screening outcomes suggested large decreases in students' internalizing symptoms. These findings suggest that research-based behavioral health interventions can be adapted to be more responsive to the needs of students in urban schools.

### IMPACT STATEMENT

There is a need for more equitable access to culturally responsive mental health interventions for students in urban communities. Although this need is emphasized in research and practice, few studies provide a systemic process school teams can utilize to seek stakeholder input to inform adaptations to existing evidence-based interventions. The current study includes an example of a systematic process teams can utilize to adapt interventions.

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Prevalence rates suggest 10–15% of school-aged children display internalizing problems, including anxiety, depression, social withdrawal, and somatic concerns, with greater prevalence in high needs urban settings (Costello et al., 2005; Farahmand et al., 2011). Students attending high needs urban schools<sup>1</sup> are disproportionately exposed to stressors, due to systemic factors including racism, segregated housing and schools, unemployment, crime and violence, homelessness, and access to resources, which, in turn, have been linked to internalizing and externalizing problems (e.g., Farahmand et al., 2011; Jaycox et al., 2009). However, there are substantial inequities in the receipt of mental health services in high needs urban schools, due in part, to the limited relevance of some evidence-based interventions to meet the needs of individuals from marginalized culturally and linguistically diverse backgrounds (Barrera et al., 2013; Bradshaw et al., 2008). Researchers have long emphasized the importance of school-based interventions being

culturally responsive and how the local context (classroom, school, neighborhood, and community) impacts outcomes of interventions (Aber et al., 1998; Cramer & Castro-Olivo, 2016; Durlak et al., 2011). However, limited research has been conducted on the adaptation of existing research-based social emotional learning (SEL) curricula in high needs urban schools to meet the needs of students in this setting who are at greater risk of developing internalizing problems (Bradshaw et al., 2008; Farahmand et al., 2011). The present study explored a process of systematically adapting existing curricula using stakeholder focus groups.

### SEL Targeting Internalizing Problems

The delivery of an evidence-based SEL curriculum to all students is also an important component of many multi-tiered systems of support (MTSS) frameworks and involves the teaching of social-emotional competencies to children

with the goal of preventing difficulties and promoting competencies (Durlak et al., 2011; Payton et al., 2008). CASEL (2020) defines SEL as “the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions.”

One such program, Merrell’s Strong Start (prekindergarten through second grade), Merrell’s Strong Kids (third through eighth), and Merrell’s Strong Teens (ninth through twelfth), can be utilized as Tier 1 SEL curricula or small group interventions and utilizes cognitive–behavioral and affective education strategies (Carrizales-Engelmann et al., 2016a, 2016b, 2016c; Whitcomb & Damico, 2016a, 2016b). These curricula include 10–12 lessons (ranging from 35–55 min) focused on developing students’ social emotional competencies utilizing instruction in understanding emotions in self and others, dealing with anger, clear thinking, problem solving, coping with stress, thinking positively, and goal setting. Strong Kids has been linked to reductions in internalizing symptoms at Tier 1 and Tier 2 in multiple suburban general education samples and one sample of students receiving special education from an urban school (Caldarella et al., 2009; 2019; Kramer et al., 2014; Merrell et al., 2008; Neth et al., 2020; Whitcomb & Merrell, 2012).

In a high needs urban school, Ryan et al. (2016) assessed the 14-week implementation of Strong Kids in Tier 2 intervention groups with 39 female students in Grades 4 and 5 (20 intervention group, 19 delayed treatment control group). Participants demonstrated gains on the Strong Kids Content Knowledge assessment from pre to posttest (Ryan et al., 2016), however there were no significant improvements on teacher-completed rating scales assessing the participants’ self-regulation, responsibility, social competence, and empathy (Ryan et al., 2016). That is, the gains in knowledge did not appear to translate to their teachers’ perception of the skills in the classroom. Ryan et al. (2016) suggested future studies explore more culture and gender targeted interventions, hypothesizing that stronger effects would be observed if the curricula were more culturally and contextually relevant.

### Culturally Adapting Interventions

Cultural and contextual fit of the intervention is an important factor to consider related to intervention effectiveness. Although manualized evidence-based interventions such as Merrell’s Strong Kids series can be effective at decreasing internalizing symptoms (Caldarella et al.,

2009; Whitcomb & Merrell, 2012), these interventions may not be responsive to the needs of the local community as they were designed (Weist et al., 2018). Utilizing a modular approach by focusing on the critical skills of an intervention (e.g., psychoeducation, cognitive coping), may be a more effective and feasible strategy for implementation in schools as opposed to attempting to implement the manualized intervention as it was intended in its entirety (Chorpita et al., 2005, 2013; Weist et al., 2018). Research in the area of adapting evidence-based interventions has largely been in the areas of psychotherapy and health interventions targeting medical issues, such as diabetes, where culturally adapted interventions have resulted in more positive outcomes as compared to treatment as usual or no treatment control groups (Hall et al., 2016).

Bernal et al.’s (1995, 2009) ecological validity model has informed the cultural adaptation of psychotherapy evidence-based treatments along eight dimensions of interventions: language, persons, metaphors, content, concepts, goals, methods, and context. Language refers to the language of the intervention, such that the materials and delivery by the interventionists should reflect the language of the target group. Persons refers to interventionists being aware of and responsive to the needs of the target group. Metaphors or examples refer to the intervention incorporating important stories and symbols of the cultural group into the intervention. Content refers to the intervention including experiences, customs, and traditions of the target group. Concepts is related to the intervention including mental health related language that reflects the experiences of the group, such as acculturative stress. Goals refer to making sure the goals of the intervention align with those values of the cultural group. Methods relate to the intervention incorporating knowledge of the culture, such as traditions. Context refers to the intervention incorporating the group’s current experiences including developmental level and immigration status. Examples of cultural adaptations made to interventions informed by the ecological validity model include focusing on ethnic pride, learning to identify and develop strategies to cope with stress and anger related to acculturation and culturally related situations (e.g., English proficiency, one’s family’s level of acculturation), and incorporating examples and role-plays specific to the culture across settings (Castro-Olivo & Merrell, 2012).

### Adapting SEL

Limited research exists exploring the impact of SEL on students from marginalized groups as well as the cultural

adaptations of SEL (Cramer & Castro-Olivo, 2016; Durlak et al., 2011). Using Bernal et al. (1995) ecological validity model, Castro-Olivo and Merrell (2012) study explored the effectiveness of a culturally adapted version of Strong Teens for implementation with 40 adolescent Latinx immigrants. Stakeholder input was obtained from a focus group from the community where the intervention was going to be implemented, which included immigrant youth, parents of immigrant youth, and teachers of English Learners. Significant increases in SEL knowledge were found as well as stable levels of acculturative stress (Castro-Olivo & Merrell, 2012). Cramer and Castro-Olivo (2016) also utilized Bernal and colleagues' (1995) ecological validity model to guide the adaptation of Strong Teens to attempt to better meet the needs of 20 high school students (75% of participants identified as Latino/Hispanic, 15% identified as African American, one participant identified as Caucasian, and one individual did not indicate a response about their race) who were not identified as English Learners. Their results indicate significant gains in students' self-reported levels of resiliency but not in self-report of internalizing problems.

Only one study could be identified that assessed the impact of a culturally adapted version of Strong Start in an urban setting (Graves et al., 2017). To support the targeted population (African American kindergarten and first grade students), the researchers adapted the intervention to include contextually relevant literature and examples. Teacher ratings suggested significant improvements in intervention group participants' self-regulation and self-competence, as compared to the control group. No differences in externalizing problems, empathy, or responsibility scores were found. Teachers shared favorable views toward the intervention, but expressed that it was not sufficiently revised to meet with the needs of their students given the specific stressors and trauma they may have experienced.

In sum, there is emerging research supporting the positive impact of culturally adapting SEL interventions for students from marginalized backgrounds, but the need for further study remains. The current research has largely focused on specific subcultures (i.e., Latinx immigrants, African American students), has removed students from general education classrooms, has not adequately addressed the urban context, and has largely focused on adolescents (Castro-Olivo & Merrell, 2012; Cramer & Castro-Olivo, 2016; Graves et al., 2017; Vagos et al., 2015). Future research is needed to evaluate how to adapt Tier 1 and 2 interventions for students from varied cultural backgrounds in urban settings across varied grade levels.

## Current Study

The current study explored a process of adapting existing SEL curricula, Strong Start and Strong Kids (Carrizales-Engelmann et al., 2016a; Whitcomb & Damico, 2016a), utilizing the framework of Bernal and colleagues' (1995) ecological validity model to target internalizing problems in the context of a high needs urban elementary school. Utilizing a collaborative model to guide the adaptation process (Atkins et al., 2006; Barrera et al., 2013), a researcher and school psychologist partnered to solicit feedback from stakeholders to inform the adaptation of the Strong Start and Strong Kids curricula (Carrizales-Engelmann et al., 2016a; Whitcomb & Damico, 2016a). Once adapted, the intervention was implemented with 43 students in grades kindergarten, second, third, fourth, and fifth grades across 12 sessions. To explore the initial impact, pre and post intervention behavioral health screening outcomes of students who participated in the adapted intervention were compared. To guide the study method and results, phase one of this study (i.e., cultural adaptation of Strong Start and Strong Kids) includes two research questions and phase two (i.e., adapted intervention implementation) includes one research question that are outlined below.

## RESEARCH QUESTIONS AND HYPOTHESES

1. What are the opinions of stakeholders of the adapted Strong Start and Strong Kids lesson plans for implementation in an urban school?

Given the exploratory nature of this research question, no hypothesis was articulated so themes could emerge in qualitative analyses.

2. What are the revisions to the Strong Start and Strong Kids lesson plans for implementation in an urban school based on stakeholder feedback?

Hypothesis: There will be recommended revisions to incorporate scenarios more relevant to the students' identities and experiences related to identifying and coping with emotions (Graves et al., 2017).

3. Will there be pre/post differences in BIMAS-2 Negative Affect scores for students who receive the adapted Strong Start and Strong Kids intervention?

Hypothesis: There will be decreases in the Negative Affect domain on the BIMAS-2 (McDougal et al., 2017) from pre to post intervention (Castro-Olivo & Merrell, 2012; Graves et al., 2017).

## PHASE 1: CULTURAL ADAPTATION OF STRONG START AND STRONG KIDS

### Method

#### *Recruitment of Study Site*

The researcher worked with the Behavioral Health Services Department of the school district to recruit school psychologists who were interested in having their schools participate in the study. The researcher then met with the principal of one elementary school to assess interest in the research study based on the interest of the school psychologist in participating. This study was conducted in collaboration with the school psychologist employed by the district.

#### *Participants and Setting*

Stakeholder participants included 10 participants total (Wertz, 2011), split between two focus groups, with one focus group including parents/caregivers from the community and one with school staff (e.g., classroom teachers, specialist teachers) and an expert on internalizing problems (i.e., school psychologist). The parent/caregiver focus group participants all reported being residents of the community, with two participants speaking Spanish, one speaking both English and Spanish, and two speaking English (one with some Spanish). Three identified as Latinx/Hispanic. School staff focus group participants all identified as White. Two school staff reported speaking Spanish in addition to English and two reported being residents of the community.

The setting of the stakeholder focus groups was an urban elementary school in the Northeastern United States. According to the Department of Education School Profile, the racial and ethnic breakdown of the overall district at the time of this study was as follows: Hispanic (41.90%), White (14.20%), Asian (9.00%), African American (31.50%), Multi-Race, Non-Hispanic (3.00%), Native American (0.30%), and Native Hawaiian or Pacific Islander (0.20%) (Massachusetts Department of Elementary and Secondary Education, 2019). The racial and ethnic breakdown of the school was: Hispanic (80.1%), White (16.4%), African American (2%), Asian (1.2%), and Multi-Race, Non-Hispanic (0.4%). Approximately 48.10% of students in the study school had a first language other than English, 19.60% had been diagnosed with disabilities, and 58.30% were economically disadvantaged (Massachusetts Department of Elementary and Secondary Education, 2019).

#### *Researchers*

A school psychology doctoral student, who is also a certified school psychologist, served as the lead researcher of the current study. The lead researcher identified as female and White. The school building school psychologist, who

identified as female and White, supported this project significantly through coordination, her knowledge and credibility with the school community, and by serving as a data collector during the stakeholder focus groups and observing treatment integrity during some intervention sessions. Two school psychology doctoral students also served as data collectors. Both identified as female. One identified as Black and one identified as White. The lead researcher used didactic instruction and modeling to prepare these partners to take notes during the stakeholder groups and utilize the treatment integrity checklist during intervention implementation.

Our identities and experiences undoubtedly impact our views and approaches to applied research. We have a range of experience in school psychology at both the doctoral and educational specialist levels including advanced, midcareer, and early career professionals in public and private or alternative settings, university school psychology graduate training programs, and clinical and community settings primarily in the Northeast section and throughout the United States. The majority of our professional experiences have been in urban areas. Many of us have worked internally in the public school system where this study was conducted, as practitioners, through practicum experiences, systems consultation, or leadership roles. Some members of this team work solely in the public school system where this study was conducted. Most of us have trained or worked in the same school psychology graduate program which is grounded in social justice, public health, and scientist-practitioner approaches. Some of our approaches are grounded in behaviorism. Although our research and clinical interests are somewhat varied, we all remain deeply committed to social justice, urban school psychology, increasing representation of individuals from marginalized groups in the field of school psychology, and advocating to dismantle oppressive systems. We represent many dominant identities (White, cisgender, heterosexual, middle class, Christian, and identify as politically progressive, which in our geographic area is the dominant viewpoint). We all identify as female and some of us represent other non-dominant and marginalized identities (Black, first-generation college or graduate students). The current study relates to the systematic exploration of incorporating different stakeholder views into the cultural adaption of an intervention. Some of the researchers in the current study are parents/caregivers and others have the experience of belonging to a marginalized group so they may have identified with more than one stakeholder group in the current study. We remain committed to critically examining our positionality and what this means for our biases and viewpoints in perpetuating inequitable systems.

## Measures

**Stakeholder semistructured interview.** The researcher developed and utilized a semistructured interview format (e.g., Ciao et al., 2018) which included questions on participants' initial thoughts about the lesson plans, the relevance of the lessons to the students' culture and home/neighborhood context, possible adaptations to the lesson plans based on this context, thoughts around the preliminary adaptations the researcher made prior to the focus groups, and hopes related to what their children/students would learn for social-emotional skills.

**Stakeholder demographic form.** Stakeholder demographic data was collected based on stakeholder report and consisted of age, ethnicity, languages spoken, whether they resided in the community, role at the current school, and number of years being involved at the current school.

**Procedures.** At the beginning of the school year prior to the intervention, the lead researcher in collaboration with the building school psychologist and family liaison began a process of recruiting stakeholders (i.e., parents/caregivers, teachers, and experts on internalizing problems) to participate in two stakeholder focus groups. The general responsibilities of the family liaison to support the school included fostering communication between families and the school, improving accessibility of school activities and materials for Spanish-speaking families, and increasing familial involvement through academic and enrichment activities. To recruit parent/caregiver participants, the family liaison sought interest in focus group participation at a school site council/PTO meeting and also contacted parents she collaborated with regularly. Focus group teacher participants were recruited by an email sent out by the building school psychologist to all teachers and then following up in person with teachers to assess interest in participating. Meals/snacks were offered.

The researcher made preliminary adaptations to the lesson plans prior to the focus groups for the stakeholders to review. Initial adaptations were made to the intervention based on knowledge of the community and literature around evidence-based practices targeting internalizing problems for urban populations. Preliminary adaptations were made prior to the focus groups given Barrera and colleagues' (2013) recommendation that cultural adaptation processes should include a combination of bottom-up and top-down approaches. Top-down processes involve utilizing data obtained from intervention research (e.g., theories, procedures) to inform adaptations.

One focus group was with parents/caregivers and the other with school staff (e.g., teachers) and an expert on

internalizing problems (e.g., school psychologist). Each focus group met once for approximately 60 min. Stakeholder groups begin with a brief description of the purpose of the group, informed consent was obtained from participants, and participants were asked to complete a demographic form. Focus groups were not taped but notes were taken throughout the groups (Bertrand et al., 1992; Center for Innovation in Research and Teaching, n.d.). The lead researcher asked the questions on the stakeholder semistructured interview protocol and one of the data collectors was also present during the focus groups to observe and take notes. A Spanish translator was present for the focus group with parents/caregivers. At the conclusion of the groups, financial compensation (\$25 Amazon gift card) was given to participants. The lead researcher and data collector debriefed immediately following the focus groups to make sure relevant themes were captured.

**Data Analysis.** Qualitative data were analyzed using conventional qualitative content analysis to inform the adaptation of the intervention prior to intervention implementation (Hsieh & Shannon, 2005). Data analysis followed the process of: (a) a debriefing immediately following the group; (b) reading the notes taken from the groups repeatedly to attempt to understand the data as a whole; (c) reading the data word by word to highlight words that seemed to reflect important ideas/concepts related to stakeholder's thoughts about intervention adaptations to develop the codes; (d) identifying patterns/connections/themes among the data; (e) labeling the codes using the participants' words whenever possible; (f) developing categories based on these codes both within and across focus groups; and (g) organizing the categories into larger clusters to reflect themes across focus groups (Bertrand et al., 1992; Center for Innovation in Research and Teaching, n.d.; Ciao et al., 2018; Hsieh & Shannon, 2005). Data were coded by three raters (the lead researcher and two doctoral student data collectors) and any discrepancies were discussed until consensus was achieved. The aim of the analysis was to describe input obtained from stakeholders around the needs of the community. Since the research in this area is limited, the researcher chose to use an inductive conventional content analysis approach which involves not using preconceived categories but letting the categories emerge from the data (Hsieh & Shannon, 2005). Hsieh and Shannon (2005) describe the purpose of content analysis as intended to help develop a model or concept and not to develop a theory or a more thorough understanding the individuals' experiences such as is the case of a grounded theory or phenomenological approach to qualitative analysis. Credibility was assessed by a peer debriefing process (Hsieh & Shannon, 2005). The researcher utilized

focus group findings, with feedback from the school psychologist and data collectors, to further culturally adapt the intervention lessons prior to the second phase of the study.

## Results

The results for Phase 1 are described by research question and include the themes from the focus groups and subsequent adaptations to the SEL intervention.

### Focus Group Themes

Focus group data were analyzed using a conventional qualitative content analysis approach (Hsieh & Shannon, 2005). Themes from the focus groups were clustered around the following two areas: needs identified and community context (strengths and stressors). Table 1 includes clusters, categories, and example comments to represent each category from both focus groups.

### Child/Student Needs

Under the cluster of child/student needs, there were 72 references related to parent communication which can be grouped into the categories of (a) building in more communication with parents, (b) skills that parents and school staff want their children/students to learn (e.g., social skills, empathy, inclusion, understanding of others, respect for cultural diversity, coping with uncomfortable feelings so they can learn), (c) concerns they have about their children/students' feelings and experiences at school, and (d) the need for building in ways to help children/students generalize and adapt skills across settings.

### Community Context

Under the cluster of community context, there were 11 references that can be grouped into the categories of (a) the anxiety associated with current political climate and its impact on children/students functioning at school, and (b) the importance of capitalizing on community strengths and resiliency.

### Adaptations Informed by Focus Group Themes

Table 2 includes examples of the adaptations made by the lead researcher to lessons prior to the focus groups for review by focus group participants and also includes adaptations based on focus group themes. Using Bernal and colleagues' (1995) ecological validity model as a framework while attempting to maintain the core CBT components of the intervention, the researchers reviewed each lesson of Merrell's Strong Start (10 lessons, 2 booster sessions) and Strong Kids (12 lessons) to address the themes of community context and child/student needs identified by stakeholders. All lessons were adapted to add more culturally relevant examples for role-plays and practice opportunities (e.g., addressing emotions associated with current political climate, increased representation in literature and video examples, language), opportunities for parent and teacher communication to share about group content, and opportunities to share and learn about identities of peers. Table 2 includes examples of adaptations to two lesson plans (lesson 3 from Strong Start and lesson 5 from Strong Kids). Although only two lesson plans are included here, adaptations were made to all lessons of both curricula based on focus group themes.

**Table 1.** Cluster and Category Themes and Participant Comments

Cluster/Category	Examples Of Participant Comments
Child/Student Needs	
More parent communication	Focus group (FG) 1 <sup>a</sup> : "Workshops for parents-because it starts at home-learning about learning styles, disabilities-if we have the resources, we can be teaching our kids as well." FG 2: "Have to teach independence-looks different [at school] than at home."
Social-emotional skills	FG 1: "The ability to de-stress. Mindfulness. Breathing. Focus on coping skills is important." FG 2: "If you can deal with [feelings] and make them all feel comfortable, they will be able to learn better."
Parent/school staff concerns	FG 1: "Maybe he is hiding something and doesn't want me [mother] to know." FG 2: "They have so much interference in their life-they can do the work but they have so much going on around them."
Supporting Generalization	FG 1: "Having an understanding of how to explain that to children." FG 2: "Some kids will know it and some won't if they are being pulled out."
Community Context	
Current political climate anxiety	FG 1: "The climate of the world, politics, Trump." FG 2: "Anxiety about policies having a huge impact."
Strengths & Resiliency	FG 1: "Every student has multiple parts-melting pot of a person." FG 2: "What can we learn from the [families'] flexibility and resiliency?"

Note. <sup>a</sup>FG 1 refers to the parent/caregiver focus group and FG 2 refers to the school staff focus group.

**Table 2.** Adapted Lesson Plans

Intervention Lesson	Example Adaptations Made Before Stakeholder Feedback	Example Adaptations Made Utilizing Stakeholder Feedback Prior to Intervention Implementation
Strong Start Lesson 3: Understanding Your Feelings 2	Focusing/sensory tools, utilize culturally relevant children's book, incorporate Spanish emotional vocabulary, teach about link between trauma and feelings, encourage students to share about how different cultures and families show emotions, translate family bulletin into Spanish	<ul style="list-style-type: none"> <li>Family bulletin translated into Spanish to send home with students</li> <li>Incorporate increased opportunities for students to respond (e.g., use clear sheet protectors with handouts in them and dry erase markers for students to respond to questions posed by the interventionist)</li> <li>Use culturally relevant examples for having multiple feelings at once (e.g., when someone has to leave XXX)</li> <li>Include a mindfulness break at the beginning and end of the group</li> <li>Offer additional coping tools (e.g., elevator breathing, squeezing clay)</li> <li>Continue to ask students to share feeling words in the language they use at home</li> <li>Include psychoeducation about how experiencing trauma can make it difficult to identify feelings when all feelings can feel like angry or scared</li> <li>Use teacher feedback to refer to "expected" and "unexpected" ways of expressing feelings instead of "okay" and "not okay" ways of expressing feelings</li> <li>Include turn-taking activity where students try to throw a bean bag onto one of multiple scenarios (e.g., someone yells at you) on the floor and they are asked to share an expected way of coping with the feeling</li> </ul>
Strong Kids Lesson 5: Dealing with Anger	Focusing/sensory tools, incorporate Spanish emotional vocabulary, incorporate examples related to immigration status and acculturation, address link between trauma and emotions	<ul style="list-style-type: none"> <li>Incorporate increased opportunities for students to respond (e.g., use clear sheet protectors with handouts in them and dry erase markers for students to respond to questions posed by the interventionist)</li> <li>Include a mindfulness break at the beginning and end of the group</li> <li>Offer additional coping tools (e.g., elevator breathing, squeezing clay)</li> <li>Include a current video clip from YouTube about coping with anger</li> <li>Ask students to share synonyms for angry in the language they use at home</li> <li>Include a body mapping activity where each student has an individual body map they can use to identify how they experience anger in the body when the interventionist poses different scenarios</li> <li>Emphasize safety in coping with anger and that adults are available at school to help children cope with anger, how to ask adults for help across settings</li> <li>Discuss the link between trauma and anger, and how trauma can make us feel like many situations/experiences are "big deals" despite them being "little deals"</li> <li>Continue to incorporate culturally relevant examples that may trigger anger (e.g., when someone has to leave XXX or you have not seen them for awhile, loud noises in the neighborhood, the grown-ups you live with have a fight, you keep thinking about something that has happened in the past, your parents are not able to help you with your homework)</li> <li>Emphasize that families have different ways of coping with anger</li> <li>Incorporate an activity focused on feelings identification, active listening, empathy, and coping skills identification where students take turns choosing a colored Goldfish and sharing relevant anger management skills as practiced during the lesson</li> </ul>

## PHASE 2: ADAPTED INTERVENTION IMPLEMENTATION

### Method

#### Sample

Intervention participants included a sample of students from the school that were identified with increased risk for internalizing problems (in the Some Risk or High Risk range on BIMAS-2; McDougal et al., 2017) per teacher ratings conducted in fall 2018 in kindergarten through fifth grade (see Table 3 for student demographic data).

The current study focused on classes in the school whose data indicated more than 25% of a class was in the at-risk range based on Negative Affect BIMAS-2 scores suggesting they required more than what was currently being provided at Tier 1. If less than 25% of a class was in the at-risk range for Negative Affect scores, the class was not included. Based on fall 2018 screening, seven classrooms in kindergarten-fifth grade out of 14 classrooms were deemed eligible to participate in the study. No first

grade classrooms met this criteria at the study site. Teachers were initially approached via email to solicit interest in participating in the current study. In the seven classrooms, 51 students were at the Some Risk or High Risk for Negative Affect. Consent forms were sent home to parents/guardians of students. If consent forms were not returned to school, the building school psychologist called parents by phone with the researcher present to follow up about the consent form to assess interest in participation. Of those 51 students, one student moved during the study, one student had an injury that prevented participation, and six students did not return consent forms, resulting in a total number of 43 student participants, which is an 84% participation rate. There were approximately four students in the rest of the school who were identified as being in the Some or High Risk range who were not in eligible classrooms.

From the seven classrooms, teachers were an average of 31 years old. Participants reported a range of 1-19 years of teaching experience with a maximum of eight years at

the study school. All teachers were certified to teach general education, while five were dually certified in special education. Two teachers taught in self-contained classrooms for children identified with Autism, Communication, and/or Learning Disabilities and one classroom was a Sheltered English Immersion classroom. All teachers, except for one, held master's degrees. Six out of seven teachers reported having experience teaching SEL. None of the teachers had experience implementing Strong Kids but reported having experience implementing Open Circle, Second Step, Seven Habits, Responsive Classroom, and PBIS. One teacher in the sample reported identifying as Black/African American and Latinx/Hispanic, while the rest of the teachers identified as White. Three out of seven teachers reported speaking Spanish in addition to English. Teachers reported the majority of their students identified as Latinx/Hispanic.

### Setting

The second phase of the study involving implementation of the adapted intervention occurred in the same urban elementary school included in Phase 1.

### Measures

#### The Behavior Intervention Monitoring Assessment System 2

Students' internalizing behaviors were assessed using the BIMAS-2 (McDougal et al., 2017). The BIMAS-2 is a 34

item norm-referenced universal screening assessment of social, emotional, and behavioral functioning for use with children and adolescents ages 5 to 18 years (McDougal et al., 2017). The sample of 1400 teacher ratings of students ages 5-18 used to develop norms for the BIMAS-2 closely approximates the distribution of race/ethnicity of the 2000 U.S. Census (McDougal et al., 2017). The BIMAS-2 Teacher is completed electronically by teachers twice per year (fall and spring) for all students as part of the implementation of a behavioral health systems framework (Amador et al., 2017; Pearrow et al., 2017a, 2017b). Teachers participating in the behavioral health systems framework have previously received training in how to complete the BIMAS-2 online. The BIMAS-2 takes approximately 5-10 min to complete per student. Ratings involve the teacher rating the student according to a Likert scale on a scale of 1-5 (*Never, Rarely, Sometimes, Often, or Very Often*).

The seven items of the Negative Affect scale of the BIMAS-2 were used to assess internalizing symptoms of the sample in this study. Items include: the student appeared sleepy or tired; appeared depressed; acted sad or withdrawn; was easily embarrassed or felt ashamed; appeared anxious (worried or nervous); expressed thoughts of hurting themselves; or was emotional or upset. Based on these items, students are categorized as Low Risk (T score of 59 or lower), Some Risk (T score of 60-69), and High Risk (T score of 70 and above). The BIMAS-2 has demonstrated high reliability including internal consistency (Cronbach's alpha coefficients ranging from .81 to .91, Negative Affect: .85) and test-retest reliability

**Table 3.** Sample Student Demographics

Variable	Number of Students, N = 43	Percentage of Sample
<b>Grade</b>		
K	5	11.63%
1	0	0.00%
2	9	20.93%
3	5	11.63%
4	18	41.86%
5	6	13.95%
<b>Primary race</b>		
Hispanic	35	81.40%
White	8	18.60%
<b>Home language</b>		
Spanish	14	32.56%
English	25	58.14%
Other	4	9.30%
<b>ELD level<sup>a</sup></b>		
1	2	4.65%
2	4	9.30%
3	7	16.28%
4	9	20.93%
5	2	4.65%
No ELD level	19	44.18%
<b>Special education</b>		
Receiving services	12	27.91%
Not receiving services	31	72.09%
<b>Gender</b>		
Female	22	51.16%
Male	21	48.84%

Note. <sup>a</sup>ELD refers to English Language Development level.

(Pearson's  $r$  coefficients ranging from .85 to .91, Negative Affect: .85). McDougal et al. (2017) suggested that a  $T$  score difference of nine or more is needed to establish statistical significance between time one and time two for Negative Affect scores. They do not discuss their analyses for calculating the Reliable Change Indices (RCIs). Although other measures were considered for inclusion in the current study to measure progress in response to the intervention, those measures have not been able to consistently capture change in response to Strong Kids implementation (Ryan et al., 2016; Schwartz, 2016).

### **Treatment Integrity**

After stakeholder input was received on adapting the intervention lessons, the researcher modified the treatment integrity checklists from the Strong Start/Strong Kids curricula to reflect the adaptations. The treatment integrity checklist involved the lead researcher completing a self-report of adherence to lesson components of the adapted intervention after each session (indicating level of implementation of each intervention step: not implemented, partially implemented, or fully implemented; Sanetti & Collier-Meek, 2019). Treatment integrity as calculated by the number of partially and fully implemented steps being divided by the total number of applicable intervention steps for each session and then multiplied by 100 to obtain a percentage score. One data collector also observed for 33% of intervention sessions utilizing the same form and interobserver agreement (IOA) was calculated (Kratochwill et al., 2010). IOA was calculated by dividing the total number of intervention steps where there was exact agreement among raters by the number of intervention steps in the session and multiplying by 100 (Cooper et al., 2007).

### **Teacher and Classroom Demographic Form**

The following classroom level student demographic data was collected based on teacher report: number of students, race/ethnicity, gender, age, and number of students receiving special education services. Classroom teacher demographic data was collected based on teacher report and consisted of age, highest degree earned, certification held, number of years of teaching, number of years of teaching at current school, current grade taught, grades previously taught, race/ethnicity, languages spoken, whether they resided in the community, and experience implementing SEL.

### **Independent Variables**

#### **Intervention**

The intervention consisted of the 12 Strong Start/Strong Kids culturally adapted lessons (45 min in duration, see

Table 2) that occurred once per week either delivered in the classroom setting or in small groups by the researcher depending on the classroom. The number and duration of sessions followed the Strong Start/Strong Kids curriculum (Carrizales-Engelmann et al., 2016a; Whitcomb & Damico, 2016a).

#### **Time**

Teachers completed BIMAS-2 ratings for students at preintervention (October/November 2018) and postintervention (April/May 2019).

#### **Procedures**

This study was approved by the Institutional Review Boards (IRBs) of the university and school district.

#### **Intervention**

Twelve sessions (once per week for 45 min) of the culturally adapted intervention were implemented by the researcher either in the classroom or small groups. Tier 1 SEL instruction at this particular school involved the expectation of weekly implementation of Second Step in all classrooms so all students were expected to be receiving Second Step in addition to receiving the adapted intervention once per week (Committee for Children, 2014). All intervention sessions were implemented by the lead researcher. Classroom teachers were asked to attend sessions and support with classroom management and reinforcement of skills. Treatment integrity of the adapted intervention was assessed by interventionist self-report after each session and 33% of sessions were observed by a data collector. Overall high adherence levels were documented across groups,  $M=97.14\%$ ,  $SD=2.59$ . IOA exceeded the minimum acceptable value of 80.0% across groups ( $M=94.33\%$ ; Kratochwill et al., 2010).

#### **Post-Intervention**

Postintervention, teachers complete the BIMAS-2 as part of Spring 2019 screening for all students. Postintervention, all teachers were asked to complete the teacher and classroom demographic form. Financial compensation (\$50 Amazon gift card) was given to teacher participants at the conclusion of their involvement.

#### **Design**

A quasi-experimental group design was utilized to assess the effectiveness of the adapted intervention on student outcomes (preintervention and postintervention). In fall 2018 (October/November), teachers rated all of their current students on the BIMAS-2. After the 12 sessions of the intervention, teachers rated each of their students again (April/May).

## Data Analysis

Descriptive statistics were calculated for demographic data for teacher and student participants. Means and standard deviations for BIMAS-2 scores were calculated at baseline and postintervention. Cohen's *d* and Hedge's *g* were used to calculate effect sizes (Rosnow & Rosenthal, 1996; Ryan et al., 2016).

## Results

Decreases in Negative Affect T scores suggest improvement in symptoms/functioning while increases in scores may reflect worsening symptoms (McDougal et al., 2011). Negative Affect T scores decreased from preintervention,  $M=65.98$ ,  $SD=5.58$ , to postintervention:  $M=57.63$ ,  $SD=8.31$ , suggesting teachers rated their students as having fewer concerns related to Negative Affect after the intervention. Given Cohen's (1988) guidelines for the interpretation of effect sizes, large effects were observed for BIMAS-2 Negative Affect scores from preintervention to postintervention,  $d = -1.50$ ,  $g = -1.47$ .

As previously mentioned, prior to the intervention at fall 2018 screening, 10 of the 43 participants fell in the High Risk range for Negative Affect and 33 of the 43 participants were in the Some Risk range for Negative Affect. At postintervention, three participants fell in the High Risk range and 15 participants fell in the Some Risk range for Negative Affect. See Figure 1 for illustrated percentages of students in the different risk categories preintervention and postintervention. Of the 18 participants who remained in the High Risk and Some Risk ranges at postintervention, seven participants decreased a full category from the High Risk range (at preintervention) to the Some Risk range (at postintervention). One participant decreased a full category from High Risk (at preintervention) to Low Risk (at postintervention). No participants in the Low Risk range at preintervention fell in the High Risk or Some Risk ranges at postintervention. Only four participants in the High Risk or Some Risk ranges at preintervention displayed increases in Negative Affect scores from pre- to postintervention. One participant maintained the same score in the High Risk range while another participant's scores increased from the Some Risk to High Risk range at postintervention. Of those participants,  $n=8$ , who remained in the Some Risk range at postintervention, four participants displayed decreases in Negative Affect scores within the Some Risk range and one maintained the same score.

## DISCUSSION

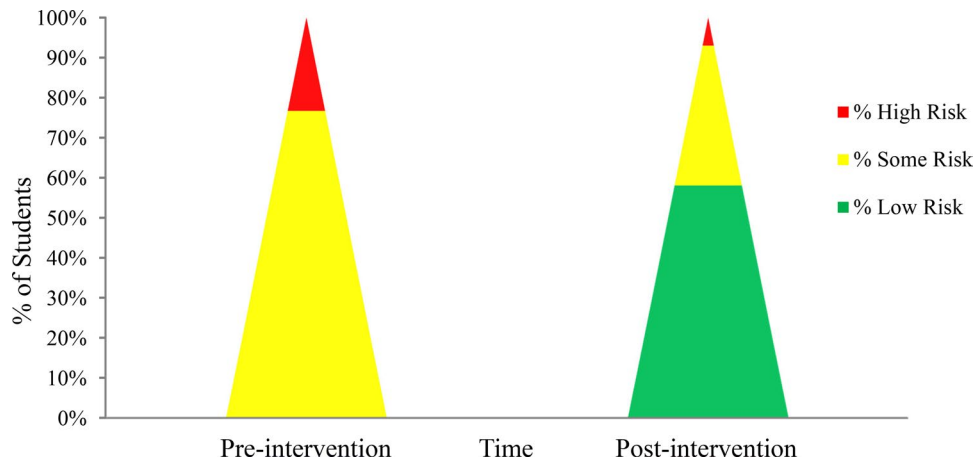
The purpose of this study was to pilot a systematic process of culturally adapting the Strong Start and Strong Kids

curricula utilizing stakeholder input for implementation with a sample of elementary age students at risk of internalizing concerns from an urban elementary school.

## Intervention Adaptations

From the clusters and categories that emerged in the stakeholder focus group data, the following themes related to intervention adaptations were identified: (a) increasing the relevance of the curricula to the student population (e.g., embracing diversity, capitalizing on student and community strengths, empathy toward self and others, self-advocacy and communication, learning to adapt to different expectations in different environments, identifying feelings, self-regulation techniques, breathing, mindfulness, de-stressing, and coping skills), (b) building in ways to help the children/students generalize across settings (e.g., establishing a common language, keeping teachers aware of content being taught, communicating with parents more regularly), and (c) increasing school staff knowledge of the community context (e.g., understanding the diversity of the community, trauma training). These findings are consistent with themes that have emerged related to studies that have sought stakeholder feedback either prior to or following intervention implementation, particularly around the importance of the intervention sessions including examples relevant to urban communities (e.g., Graves et al., 2017; Graves & Aston, 2018). Given the current political climate and the theme of hostility toward immigrants especially Spanish-speaking individuals that emerged during the focus groups, it is possible that different themes related to adaptations may have emerged in a different time/context. Another theme that emerged about the importance of students generalizing skills across settings has been explored in a follow up study by comparing intervention outcomes between the classwide and small group conditions utilized in the current study.

Several studies on Strong Teens included stakeholder input in making intervention adaptations (e.g., Castro-Olivo & Merrell, 2012; Cramer & Castro-Olivo, 2016) but no studies could be identified that utilized systematic stakeholder input to inform adaptations prior to Strong Start and Strong Kids implementation. Graves et al. (2017) made adaptations as researchers to Strong Start prior to implementation but did not appear to include a formal process for seeking stakeholder input. Although studies often share stakeholder feedback after intervention implementation (e.g., shorter lessons, more visuals, Kramer et al., 2014), the current study adds to the literature by utilizing a formal stakeholder feedback process prior to intervention implementation

**Figure 1.** Risk Level Triangle of Participants Per Negative Affect on BIMAS Pre and Post Intervention Comparison

### Summary of Evidence of Effectiveness of the Adapted Intervention

Negative Affect scores decreased from pre to post intervention suggesting improvement in internalizing concerns. Effect sizes documented in the current study were larger than other studies involving the Strong Kids series without adaptations (Caldarella et al., 2009; Kramer et al., 2014; Marchant et al., 2010; Merrell et al., 2008). In previous studies, participants were largely White (Marchant et al., 2010), though some studies included primarily African American students at-risk for emotional difficulties (Merrell et al., 2008) and Hispanic students not at-risk (Kramer et al., 2014). Previous studies have found larger changes in internalizing symptoms for students rated as higher risk for internalizing symptoms as compared to students at lower risk when interventions were implemented classwide (Caldarella et al., 2009; Kramer et al., 2014) or in small groups (Green et al., 2019; Marchant et al., 2010). This may have contributed the current findings as this study only included students at-risk for internalizing concerns. Results should be interpreted with caution given the quasi-experimental group design utilized in the current study. Due to the lack of a control group, it is not possible to attribute the decrease in Negative Affect scores solely to the intervention. The researchers chose this design given the clinical implications of delaying targeted intervention to those in need of support and in the complexity of isolating independent variables in applied settings.

Pre-post intervention effect sizes were also stronger than those documented in other studies that incorporated cultural adaptations of other SEL interventions (e.g., Green et al., 2019), including a study that involved adaptations of Strong Teens (Castro-Olivo & Merrell, 2012). Graves et al. (2017) found large effects on teacher ratings of students' self-regulation and self-competence in response to an adapted version of Strong Start, however this study did

not examine internalizing symptoms. Research involving the cultural adaptation of SEL has not consistently reported and described effect sizes so this study adds to the literature base in this area (e.g., Aston & Graves, 2016; Graves & Aston, 2018).

### Limitations

#### External Validity

Although this study contributes to research on how to culturally adapt an intervention to better meet the needs of students in an urban elementary school at-risk for internalizing problems, given the sample and lack of a control group the results are limited in their generalizability to other schools and samples, similar to other quasi-experimental studies.

#### Samples

Student feedback to inform intervention plan development could likely have been helpful to make the intervention even more relevant to the school. Stakeholders were not given the opportunity to review the questions prior to the focus groups or adaptations made to the intervention after the focus groups due to time constraints. Future studies should explore incorporating stakeholder input at additional stages including assessing the need for intervention (e.g., who would benefit from intervention), selecting an evidence-based intervention, determining whether the existing intervention requires adaptation and what approach to utilize in adapting the intervention (Latham et al., 2010). The current study included one expert on internalizing problems (the school psychologist); future studies may consider including topic experts on SEL throughout the different stages of adaptation.

Given the small sample of elementary school students at-risk for Negative Affect concerns from an urban

elementary school who participated in this study, it is difficult to generalize findings to samples different from the participants included in the current study. The intervention school serves a population with a large number of students identified as high needs. Future studies could examine differences in response to the adapted intervention between students receiving special education services and those not receiving special education services. Although the interventionist remained the same, it is possible that other teacher-level effects (e.g., having the teacher present to support generalization of skills in the classwide sessions) impacted intervention delivery and student outcomes.

### Outcome Measures

This study only utilized one outcome measure for student outcomes. This study only assessed the effect of the intervention on the Negative Affect scale. Future studies should consider incorporating additional outcome measures such as academic performance, risk related to externalizing behaviors, and positive skills or behaviors.

### Implications and Future Directions

There are a number of implications related to this study that can inform practice and research related to culturally adapting and implementing SEL. Intervention effectiveness studies often describe the importance of interventions being culturally responsive to better meet the needs of the intervention group however, many studies do not provide guidance as to how to engage in a process of seeking stakeholder input to inform intervention adaptation. This study adds to the literature base with a clear process to engage in to seek stakeholder input (both from school staff and community members), analyze findings from focus groups, use themes to inform intervention adaptations, and to document the adaptation process. Although there have been a number of studies in recent years adding to the literature base in adapting interventions to better meet the needs of a specific cultural group (e.g., Castro-Olivo et al., 2018; Castro-Olivo & Merrell, 2012; Graves et al., 2017), the current study adapted Strong Kids more broadly to attempt to meet the needs of the student population in a local urban school. Additionally, the population of students at-risk for internalizing problems is often over-looked so systems frameworks and targeted interventions may be effective strategies for decreasing risk (McIntosh et al., 2014).

### NOTE

1. For the purpose of the current study, high needs schools are defined as schools with a high percentage of students

who are economically disadvantaged, have disabilities, and are English Learners or former English Learners (Massachusetts Department of Elementary and Secondary Education 2020).

### DISCLOSURE

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**Melissa M. Pearrow, PhD**, serves as the executive director of the BIRCh Project and has been a professor in the School Psychology PhD Program at UMass Boston for 15 years. As the former program director, she has managed courses for the program of study, overseen admissions, secured field placements for practicum students and interns, and obtained program approval to meet state and national credentialing standards. Prior to joining the faculty, she spent ten years as a school psychologist, in which she coordinated the program for students with emotional and behavioral disorders. Her training in inpatient, outpatient, and community mental health settings informs her research on school-based mental health, including her partnership with the Boston Public Schools and Boston Children's Hospital in the development of the Comprehensive Behavioral Health Model. She is a past president of the Massachusetts School Psychologists Association and serves as cochair of the Ethics Committee of the National Association of School Psychologists. She is the author of *Identifying, assessing, and*

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**Melissa A. Collier-Meek, PhD, BCBA**, (Mel) conducts research focused on helping educators implement evidence-based practices to improve outcomes for students. Informed by implementation science, her work addresses improving fidelity assessment; understanding the multi-level process that impacts school-based implementation; and testing feasible, tiered strategies for supporting teachers and paraeducators to deliver targeted and class-wide interventions. She has published over 50 peer-reviewed publications and delivered over 100 national and local presentations. Her research has twice been a finalist for article for the year in school psychology journals (Collier-Meek et al., 2019 at *School Psychology Review*; Sanetti et al., 2015 at *Journal of School Psychology*). With Dr. Lisa Sanetti, she is the co-author of the book *Supporting Successful Interventions in Schools: Tools to Plan, Evaluate, and Sustain Effective Implementation* published by Guilford Press in 2019. Dr. Collier-Meek received the Lightner Witmer Award from the American Psychological Association for her early career

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