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# A formative evaluation of 'Mind Matters: Overcoming Adversity and Building Resiliency' with Hispanic adolescents prior to and during Covid-19

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## Abstract

Youth living in poverty are more likely to experience cumulative stressors including multiple adverse childhood events. Further, the Covid-19 pandemic has disproportionality affected Hispanic youth and communities, leading to unprecedented levels of trauma. This research responded to a need for a youth resiliency-building program in an urban and impoverished area with a majority Hispanic population. We conducted a formative evaluation of a youth intervention entitled *Mind Matters: Overcoming Adversity and Building Resilience*, which aims to help youth overcome adversity and to build resilience via psychoeducation and skill development. Just prior to the pandemic in the United States (August-December, 2019), youth ( $N=12$ ) participated in *Mind Matters* as part of an after-school program. Immediately following, we utilized focus groups to solicit youth's perspectives on the acceptability of the program, what they had learned, content areas they liked best, and their recommendations for program improvement. Follow-up phone interviews were also conducted three months later (March 2020) while youth were at home as a result of the pandemic. Youth enjoyed the program and were able to apply skills learned to cope with stress in their daily lives and across ecological contexts. Findings point to the program as particularly well-suited to older adolescents. During the pandemic, most youth continued to utilize self-soothing and mindfulness skills to emotionally self-regulate while facing challenges

related to home schooling. Findings highlight the importance of trauma-resiliency programming for youth and offer recommendations to practitioners utilizing the *Mind Matters* program.

**Keywords** Trauma, Mindfulness, Preadolescents, Adolescents, Pandemic, Resiliency, Qualitative, Evaluation

Adolescence is an ideal time to reach youth, particularly high risk, with school and community programs aimed to build youth resiliency. Youth living in communities marked by poverty are exposed to a great deal of stress, which can include witnessing home, school, and community violence (Williams & Adams Rueda, 2022), as well as a large number of other adverse childhood events (ACEs; Felitti et al., 1998). When stress is prolonged and chronic, it can disrupt the development of brain circuits, increase levels of stress hormones, and cause the onset of lasting physical, mental, and emotional problems (Kerker et al., 2015). For example, research has associated trauma in early life to an increased risk for posttraumatic stress disorder (PTSD) (Powers et al., 2016). Some of the most researched and effective strategies for healing the effects of trauma include mindfulness, anxiety and stress management, emotion regulation, and mindfulness meditation (Benish et al., 2008; Colgan et al., 2016; Hopwood & Schutte, 2017; Khusid & Vythilingam, 2016a; Thompson et al., 2011; Duan, 2016; Shapiro et al., 1998).

The aim of this study was to explore youth perspectives concerning a program entitled, *Mind Matters: Overcoming Adversity and Building Resiliency* (herein referred to as *Mind Matters*; Curtis & Stolzenbach, 2017). Specifically, we conducted a formative evaluation of this program to assess acceptability among middle school and high schoolers in an after-school setting. We also assessed the youth's use of the resiliency-building skill sets by collecting their perspectives both at the conclusion of the program and three months later during the COVID-19 pandemic. This study is important in that there is a dearth of research examining the acceptability and effectiveness of resiliency-building programs for youth who have experienced trauma and particularly as related to the pandemic.

## Impact of Trauma

Early childhood trauma, also referred to as adverse childhood experiences (ACEs), can be detrimental to the healthy development of children and adolescents. These can include psychological, physical, and sexual abuse, exposure to family violence and other forms of household dysfunction (e.g., substance use), parents with one or more mental illnesses or disabilities, as well as being in the foster care system or otherwise experiencing parental and kinship transitions (Felitti et al., 1998; Cronholm et al., 2015). Children with marginalized identities, in particular youth from immigrant families, often face additional community-level factors that may include stress associated with acculturative processes (Romero & Roberts, 2003) and witnessing increased rates of abuse across home, school, and community contexts (Williams & Adams Rueda, 2022) as families move into urban areas with higher rates of poverty and crime (Jocson et al., 2018; Smokowski et al., 2009). They may also perceive racial discrimination within their schools and larger society (Wheeler et al., 2020). Being raised in unpredictable or threatening environments has been associated with psychological and biological disruptions to development. For example, in communities with persistent stressors, pregnant mothers are at risk for transferring stress to their unborn child (Van der Kolk, 2015). One study sampled 912 children in the child welfare system who had high levels of adverse experiences and found that physiological symptoms including inflammation and a weakened immune system were already present (Kerker et al., 2015). Early trauma often continues into later childhood, adolescence, and adulthood in the form of mental health issues, chronic medical conditions, early death, and other health disparities (Kerker et al., 2015; Center on the Developing Child at Harvard University, 2010; Middlebrooks et al., 2008).

Importantly, a new form of trauma has emerged world-wide and evokes consideration of youth challenges and outcomes. COVID-19, a previously unidentified coronavirus (SARS CoV-2), emerged in the United States at the start of 2020, causing serious illnesses among individuals (Center for Disease Control and Prevention [CDC], 2021). This virus is thought to spread from person to person through respiratory droplets produced when an infected person coughs, sneezes, or speaks. COVID-19 has spread quickly worldwide, with a devastating impact on the health and wellbeing of many (CDC,

2023). It has drastically changed the daily lives of numerous individuals including youth, who have been challenged to stay at home so as to not further spread the virus. This has inhibited youth from socializing with peers through school and after-school activities, as well as exposed many youth to additional stressors through parental unemployment, self-led learning via the internet, and a lack of social and emotional support systems (Lawson et al., 2020; Phelps & Sperry, 2020; Qi et al., 2020). Some youth will have experienced the illness or death of a loved one. Further, youth have been exposed to daily media concerning the risks of this virus, and have been required to wear masks when they leave the home. These home, school, and environmental stressors will undoubtedly yield a plethora of research concerning increased trauma symptomology. Early research suggests that the consequences of the pandemic on mental health may be more pronounced for youth with pre-existing vulnerabilities and mental health challenges (Caffo et al., 2020).

### **Youth Resilience**

Masten and Reed (2002) define resilience as “phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk” (p. 75). These include both cognitive and social/interpersonal assets, which act in tandem to support one’s ability to successfully adapt (Madewell & Ponce-Garcia, 2016). For example, setting goals for the future (Hass & Graydon, 2009), prioritizing and planning behaviors (Ponce-Garcia et al., 2015), and optimism (Segovia et al., 2012) are cognitive protective factors. Having close relationships with caring adults and access to supportive relationships are social protective factors that contribute to youth’s development of resiliency (Masten & Reed, 2002; Ungar et al., 2008). Confidence in social situations is also an important interpersonal skill (Madewell & Ponce-Garcia, 2016). During COVID-19, many youth have used social media to stay connected while social distancing and research suggests that this may have contributed to the continued development of important peer relationships (Andrews et al., 2020). Research also points to mindful awareness and body-centered modalities which can help to regulate and heal the nervous system and build resiliency (Bing-Canar et al., 2016; Dikian, 2012; Emerson, 2015; Green, 2011; Hervey, 2016; Kabat-Zinn, 2015; Mirams et al., 2013; Schuch et al., 2016; Shuman et al.,

2016). Ultimately, children and youth can benefit tremendously from building resiliency, which helps to mitigate stress and contributes to overall well-being (Wong & Wong, 2012).

### **Mindfulness and Additional Resiliency-Building Practices**

Throughout history, mindfulness has been used to assuage suffering and improve one's sense of well-being, especially with respect to emotional suffering that presents as stress, anxiety, and interpersonal conflict (Germer et al., 2016). Mindfulness may be defined as a state of consciousness or awareness (Germer, 2005). One is trained to cultivate awareness of what is happening in the present moment (Kabat-Zinn, 2015), and there is an acute focus on attention and remembering (Germer et al., 2016). It includes body-centered activities such as deep breathing (Bing-Canar et al., 2016), attention to sensations (e.g., sight, smell, touch) (Dikian, 2012), and isolated attention to or focus on each body part (Mirams et al., 2013). Over the years, it has also involved coloring and art (Green, 2011), movement based activities and exercises such as yoga or dancing (Emerson, 2015; Hervey, 2016; Schuch et al., 2016), and the incorporation of music (Shuman et al., 2016).

Research supports the use of mindfulness to help foster psychological resilience to trauma and improve trauma-related symptoms (Colgan et al., 2016; Hopwood & Schutte, 2017; Khusid & Vythilingam, 2016a; Thompson et al., 2011). Shapiro and colleagues (1998) demonstrated that mindfulness meditation supports the reduction of psychological distress, anxiety, and depressive symptoms while also increasing empathy in a non-clinical sample. Mindfulness meditation has also been efficacious with post-traumatic stress disorder (PTSD) (Khusid & Vythilingam, 2016a), substance use and insomnia (Grow et al., 2015; Khusid & Vythilingam, 2016b), and major depressive disorder (MDD) relapse prevention (Teasdale et al., 2000). Further, research has found that Mindfulness-Based Relapse Prevention (MBRP) programs can be useful to alleviate distress and implement change in maladaptive patterns of behavior among individuals with substance use disorders (Bowen et al., 2009). Rawlett and Scrandis (2015) examined eleven studies of mindfulness-based programs targeted towards at-risk adolescents and found that these programs lowered emotional discomfort and stress,

increased self-regulation, enhanced perceptions of interpersonal relationships, and increased self-esteem.

Mindfulness is often considered foundational with regard to one's ability to self-reflect (Baumgartner et al., 2019). Goal-setting is a natural extension of self-reflection and has been shown to help youth to self-regulate and experience positive engagement with life (Morrish et al., 2018; Nicol & Macfarlane-Dick, 2006), both of which further help youth to build resiliency and heal from trauma (Brennan, 2008; Kinniburgh et al., 2005). Peer discussions with a psychoeducation component can further assist youth to process and normalize stressors, particularly when adults have created a supportive learning environment (Nicholson et al., 2004). Body-based modalities such as yoga and qi gong are also gaining recognition as important to resiliency-building, as are stress-relieving methods including emotional freedom techniques (i.e., "tapping"; Clond, 2016). Also important to youth's capacity for resilience are the relationships they form with adults, including the extent to which these adults are able to provide co-regulation through nurturing, warm relationships, modeling, and the creation of supportive environments (Rosanbalm & Murray, 2017).

## **The Present Study**

*Mind Matters: Overcoming Adversity and Building Resilience* (Curtis & Stolzenbach, 2017) is a newly developed program aimed to build resiliency among youth who have experienced adverse childhood events (ACEs) and toxic stress. The program consists of 12 lessons which include self-soothing, discovery of emotions, understanding the difference between thoughts and emotions, building empathy, building a support system, having compassion for a traumatized brain, trauma containment and rhythm, tapping and sleep, exercise, goal-setting, asking for help, and designing a personal contract. The foundation of the program is self-regulation through the cultivation of mindfulness in order to calm physical and mental responses to discomforting events and stressful tension held in the body. Each lesson aims to increase hope, build resiliency, and overcome adversity through targeted activities and psychoeducation. Sample activities include focused breathing, body scanning, coloring, and yoga. Each of these activities support weekly mental health lessons with

accompanying worksheets, journaling, and group discussion. The program may be taught by non-clinicians in either individual or group settings with youth or adults ages 12 and up. The reader may learn more about the program by visiting:

<https://www.dibbleinstitute.org/our-programs/mind-matters-overcoming-adversity-and-building-resilience/#1650042076464-b177e73d-f0ac>

A randomized control trial is currently underway to analyze the impact of the program among a sample of primarily White and African American youth with significant trauma histories. Preliminary findings point to statistically significant differences on pre- and post-assessment with the experimental group reporting increased coping skills and decreased PTSD symptoms (Antle & Cooper, 2022). Youth also reported high levels of satisfaction with the program (Antle & Cooper, 2022). This program has been adopted by 36 states and also internationally. It aligns with Tier 1 and Tier 2 Social and Emotional Learning (SEL) support for general education as well as for use in small groups (i.e. targeted support; Dibble Institute, 2021). Additionally, there is now a digital version available of this program (The Dibble Institute, 2021). Despite the popularity of this program, no studies to our knowledge have assessed the efficacy of this program among Hispanic youth populations. Further, there are no studies that assess its acceptability among Hispanic youth participants. Including the voices of youth, particularly underserved youth of color, is crucial to future iterations of the program and to its use among practitioners.

The aims of this study were to 1.) explore middle school and high school youth's perceptions of the program; 2.) delineate their experience using the resiliency-building skills taught, and 3.) to assess the extent to which they remembered and utilized these skills post-program. Importantly, the program was delivered to youth living in a high-poverty urban area just prior to the emergence of COVID-19 (Community Health and Needs Assessment, 2019). Diverse student youths participated in the program in an after-school setting, were assessed immediately post-program concerning their experiences, and again three-months later while at home from school due to COVID-19. This unique timeframe contributes to our understanding of how resiliency-based skills can be taught and later practiced by youth during difficult and potentially traumatic historical experiences.



## Methods

### Sampling and Procedures

The *Mind Matters* program was facilitated just prior to the COVID-19 pandemic (August-December, 2020) in a community-based after-school program. The zip code in which this study was conducted statistically ranks within the top poorest in the state (Community Health and Needs Assessment, 2019). Primarily occupied by an impoverished Hispanic population, this area is also characterized by low education attainment, high crime, negative health, and adverse family trends (Kofler & Piedad, 2017; Pew Research Center, 2012; U.S. Census Bureau, 2017; U.S. Census Bureau, 2018). A needs assessment conducted by the agency where this study took place found that child abuse and neglect also disproportionately affect this community and has increased over recent years (Community Health and Needs Assessment, 2019). The assessment further delineated that families are more likely to be linguistically isolated, which impacts economic opportunities and creates poor educational attainment for adolescents (Community Health and Needs Assessment, 2019). Further, just following the delivery of the program, the pandemic targeted this community with one of the highest rates of COVID-19-related deaths (Salinas & Smith, 2021). The *Mind Matters* curriculum was delivered by interns who were trained in trauma and were in a Master of Social Work (MSW) program. They were supervised and worked alongside a youth case manager who was a licensed social worker (LMSW). Participants engaged in the 12-lesson *Mind Matters* curriculum over the course of a three-month period. Sixth and 7th grade youth were placed in a middle school group ( $n=6$  participants; 3 boys;  $M_{age}=11.2$ ) and youth in 8<sup>th</sup> through 12<sup>th</sup> grade were placed in a high school group ( $n=6$  participants; 3 boys;  $M_{age}=14.8$ ). Of the 12 youth who participated, 9 self-identified as Hispanic, 2 as mixed race, and one as White. Youth were given a participant journal, which contained various activities and reflections in accordance with each lesson. The youth participants were able to keep their journals after the program was over in order to continue practicing the skills and to re-visit course content. Participant incentives included snacks each session, as well as an ending celebration with completion certificates, pizza, and beverages.

The evaluation of this program was completed in conjunction with a university

researcher (first author), who obtained permission to conduct this community-based participatory study through the Institutional Review Board. This study was conducted as a part of a larger one which included interviews with staff and surveys with youth prior to and following the intervention. Here, we focus on data from focus groups with youth (December, 2019) and individual interviews conducted 3-months post-follow-up (March, 2020). Questions from focus groups reflected the formative aims of this study and included youth's perspectives on the acceptability of the program, what they liked about the program, what they learned, and their suggestions for improvement. Focus groups took place immediately following the 12<sup>th</sup> session, and included the same youth who had participated in the program ( $N=12$ ). Consent forms (in Spanish or English) were signed and returned for each youth, and youth also verbally assented to their participation.

Youth were no longer able to attend the after-school program beginning in January, 2021 due to the pandemic. This provided a unique opportunity to capture whether and how youth were utilizing skills learned in the curriculum while at home with family. In March of 2021, multiple attempts were made to contact all youth who had participated, although some were unable to be reached primarily due to phones being disconnected. The resulting sample included five youth, two from the middle school group (ages 11/12 respectively; one male/one female) and three from the high school group (ages 13/15/17; all female). Youth were asked how they were doing during the pandemic, what they remembered about the program, how they had been able to utilize the skills learned, which skills they found most helpful, and whether they would want to take the program again. With permission, these interviews were recorded using a phone application. Unique participant IDs linked youth's focus group and interview data.

## **Analyses**

Audio files were transcribed and all members of the research team reviewed the focus group and interview transcripts. Data analysis took place in two stages, beginning with the development of an open coding scheme using data from focus groups. Although we asked youth specific questions which formed the basis for the primary themes, this process was inductive in that we included data across all questions. A

preliminary codebook emerged from careful reading and re-reading of transcripts, as well as meetings with one another to confirm themes (Braun & Clark, 2006). Several iterations were made throughout the process until the codebook was finalized. At this stage of analysis, we also sought differences by age group and gender. No differences were apparent by gender; differences by middle school versus high school are noted in the results section. In stage two of analysis, we then utilized a deductive template approach to include interview data (Crabtree & Miller, 1999). Specifically, we sought how themes from focus group data may be elaborated to include what youth had retained from the program and the skills that they continued to utilize during the societal onset of COVID-19. Qualitative rigor was enhanced by researcher triangulation, negative case analysis, and maintenance of an audit trail throughout the analyses. Collecting post-program data also served as a form of prolonged engagement in that we continued to assess the acceptability and applicability of *Mind Matters* to the lives of youth during a globally traumatic event (Lietz & Zayas, 2010).

## Results

Four primary themes emerged from focus groups: *program acceptability*, *skills and things learned*, *content areas they liked best*, and *content areas they liked least/areas for improvement*. Each of these themes is further detailed in subsequent sections and includes examples from youth participants using pseudonyms. See Table 1 for a list of pseudonyms and descriptive information about each youth. We then elaborate on focus group themes using youth's interview data. Pseudonyms are linked across data sources so that the reader may infer how the examples give voice to individual youth.

**Program acceptability.** Youth felt that the program taught them a lot within a safe peer community, “[We]” *got to hang out with friends...we got to learn something new*” (Chris, 10<sup>th</sup> grade). Many enjoyed the program, “*I don’t want it to be over...it’s really fun*” (Luis, 6<sup>th</sup> grade). Youth described the program as “*interactive*” (Santiago, 9<sup>th</sup> grade) and felt that the content was highly relevant and fostered self-discovery, “*...I didn’t know that all this had something to do with me, but then I’m like oh my god. I always feel this. I always do that. Like this is describing me. I’m so glad I’ve done this program*” (Jazmin, 6<sup>th</sup> grade).

Although youth from both middle school and high school groups described the program as acceptable overall, it is noteworthy that some of the middle school youth expressed unfamiliarity and hesitancy regarding some of the content areas and exercises. For example, a middle schooler stated, *“We did a breathing exercise and, um, we had to lay down and like feel our stomach-- and push our stomach and it’s like, so weird....it’s like weird, but fun”* (Jazmin, 6th grade). Taken together, dialogue regarding program acceptability suggested that youth participants enjoyed the program and found it applicable to their daily lives while also feeling uncertain about the novelty of some of the mind and body tools utilized.

**Table 1.** Pseudonym Descriptive Information

<b>Middle School</b>			
<b>Pseudonym</b>	<b>Grade</b>	<b>Gender</b>	<b>Ethnicity</b>
Jazmin	6 <sup>th</sup>	Female	Hispanic
Miguel	6 <sup>th</sup>	Male	Mixed
Ana	6 <sup>th</sup>	Female	Hispanic
Luis	6 <sup>th</sup>	Male	Hispanic
Carlos	6 <sup>th</sup>	Male	Hispanic
Natalie	7 <sup>th</sup>	Female	Hispanic
<b>High School</b>			
Laura	8 <sup>th</sup>	Female	Hispanic
Santiago	9 <sup>th</sup>	Male	Hispanic
Elizabeth	10 <sup>th</sup>	Female	White
Chris	10 <sup>th</sup>	Male	Mixed
Andres	10 <sup>th</sup>	Male	Hispanic
Monica	12 <sup>th</sup>	Female	Hispanic

**Things Learned.** The psychoeducational approach utilized within the program was intended to teach skills and build understanding surrounding the healing of trauma. Youth described having learned about emotional regulation and self-soothing, which one youth described as being useful for her in school, *“The focused breathing to like calm*

*down, umm, and to like just have a little moment to yourself when like you can't really understand the [school] work and you're getting really frustrated about it"* (Elizabeth, 10th grade). Another conversation between two Hispanic 6<sup>th</sup> grade youth described how deep breathing helped to mitigate anger:

Luis: Um, when you're angry, we do like... Jazmin: A breathing exercise.

Luis: Breathe in. Breathe out. We do that. Jazmin: We inhale. We exhale.

The exchange of dialogue in this example highlights the ways in which youth bonded during the program, some explicitly stating that the program helped them to get along. The conversation that follows was among 6<sup>th</sup> graders:

Carlos: "Miss, what I liked about the program is that me and Luis never got along."

Luis: "Miss, me and Carlos had some bad times. It helped us 'cuz..."

Jazmin: They agree with [on] stuff. Carlos: We're getting there.

Further, youth from the adolescent group discussed having insights with regard to their own and others' experiences with trauma, *"I can go through situations...like hard situations that are like traumatic and be able to control my feelings"* (Monica, 12<sup>th</sup> grade); *"Yeah, it was pretty interesting to like find out how like umm kids who have had like some sort of like trauma or something happen in their life – [this] will affect them"* (Elizabeth, 10<sup>th</sup> grade). Another participant noted the increased risk factors for health issues as a result of trauma, *"There's this one thing where like if you're like abused as a child, you're like at a higher risk for like heart disease..."* (Chris, 10<sup>th</sup> grade). Overall, with the exception of one youth who preferred to rely on religion and biblical teachings (i.e., *"I just read the bible...It helps me a lot more than anything else..."*; Chris, 10<sup>th</sup> grade), youth expressed that they had learned content and tools that helped them to build resiliency and cope with challenges.

**Parts Liked Best.** The *Mind Matters* curriculum includes an array of self-soothing exercises and activities that inter- twine skill building and interactive activities with consideration to age group appropriateness. Participants were asked to identify three parts of the program that they liked the best. The first of these was the body scan during which youth were guided through awareness of body sensations and breathing while either sitting or lying down. As they focused on each part of the body, teens recalled

becoming extremely relaxed.

Another activity that received positive feedback was the marshmallow challenge. The aim of the activity was to practice patience; youth were given a marshmallow and told there would be opportunity for something positive if they waited to eat it. Students noted, *"We learned that um it's hard for some people to have patience"* (Elizabeth, 10th grade). Students were told that patience for a long-term reward, which in this case was a starburst candy, has been linked to higher success outcomes later in life. One participant recalled, *"Oh yeah. The kids who waited have a higher chance of graduating high school..."* (Chris, 10th grade).

Finally, participants also liked the activity of focused breathing and counting. One youth described how she used this breathing technique to handle a situation with a peer, *"There was this girl. She was talking like all her mess and then I went (does deep breathing). It calmed me down- like a lot"* (Jazmin, 6th grade). Youth learned that by inhaling, holding, and then exhaling the nervous system is regulated as their focus is transferred from the stress or anxiety-provoking situation to a mindful breath.

**Parts Liked Least/Areas for Improvement.** Likewise, youth described parts of the program that they liked least, which serve as potential areas for curricular improvement. Middle schoolers in particular had difficulty sitting through the lessons, perhaps because the program was delivered after school, *"I didn't like sitting down cuz I have too much energy"* (Miguel, 6th grade). Some youth also discussed how difficult it was to not be able to use their cell phones, *"Is there anything else that you would improve about the program?"* (Moderator); *"Let us use our electronics"* (Luis, 6th grade). Part of the intervention itself seemed to be re-directing students' attention away from video games, social media, and texting in order to be present with other peers in the after-school setting.

Youth from both middle school and high school groups expressed that the lessons had too much information and were overly complex, *"I liked it. It's just kind of confusing...Just like the book how it's made. Should be like a little simpler cuz I'm simple"* (Chris, 10th grade). Elizabeth (10th grade) also noted that some of the lessons were *"a bit long"* and Andres (10th grade) chimed in agreement, *"Like, get to the point"*. Taken together, youth's feedback regarding the complexity and length of the lessons

suggests that they be shorter and more simplistic, at least for youth who are participating in an after-school setting and may have been sitting long hours just prior.

Further, middle schoolers voiced that some of the lessons evoked discomfort. These experiences stemmed from discussion of trauma and coping with trauma. One youth notably disclosed her reaction, “[*The instructor*] said something, I felt uncomfortable, and I went under the table... like [we were talking about] abuse...” (Ana, 6th grade). This student's reaction to the discussion evoked judgment among peers who felt that she had “gone a little loco” (Carlos, 6th grade). This conversation did, however, provide the opportunity for the facilitator to follow-up with Ana afterwards and provide further case management.

Finally, some of the areas ‘liked least’ by youth reflected suggestions for future program refinement and delivery. The adolescent group noted that they would like having more activities outside such as “*team bonding*” (Chris, 10<sup>th</sup> grade) for the purpose of building empathy with their peers. Others mentioned inviting more participants from outside the after-school program to the group so “*more people would come in the program and see how they feel and stuff*” (Ana, 6th grade).

### **Follow-up Program Interviews during COVID-19 Pandemic**

Three months following the program termination and focus groups, individual youth were asked a series of questions about the COVID-19 pandemic and *Mind Matters*. The first of these asked whether and how youth had been able to utilize what they’d learned from the program to help them cope during the pandemic. Youth remembered some of the specific mindfulness exercises including focused breathing, peripheral vision, 5-4-3-2-1, and the body scan. Youth reflected on an increased ability to calm themselves with these tools, particularly in order to increase clarity and concentration, “*The breathing and the relaxing for like ten minutes and just to set yourself and just to refresh your brain*” (Laura, 8th grade). According to some of the youth, school had become a greater concern. One participant noted that she was using the skills learned to help calm her frustration with the increased amount of online school assignments: “*Yes, like when my teacher uploads like three more stuff, I ‘set myself [become centered] and then I do it, so I won’t get angry and put the wrong answer in or*

*something*” (Laura, 8th grade). Another explained that she was using the skills when she was having trouble sleeping due to rumination: *“Sometimes when I can’t sleep, cause I’m like thinking of my [school]work, I use that and I go through it [the Mind Matters activities] and helps me to like relax and calm down and fall asleep”* (Elizabeth, 10th grade). One youth noted, however, that she was still struggling despite remembering many of the tools: *“We learned meditation, where we just calm down, stay quiet, like breathe in and breathe out and so you do not like lose yourself and that is not working very well. I hate being in the house all day, I want to go back to school”* (Natalie, 7th grade). The after-school program itself had also been shut down to in-person services which further challenged youth to find socialization away from their homes.

Youth were also asked whether they would like to take the program again. All but one of the youth interviewed said they would like to, with one youth expressing mixed sentiment. This student commented that others in the group had been rowdy, *“...Like I want to be in a group that is like me- [they] can control themselves...at the same time like they know how to be quiet at a certain time...”* (Natalie, 7th grade). Overall, youth who were interviewed felt that they benefitted from the program, were able to remember many of the mindfulness skills in particular, and had been utilizing them at least to some extent to cope during the pandemic.

## **Discussion**

This study examined the perspectives of youth who had participated in the *Mind Matters: Overcoming Adversity and Building Resilience* (Curtis & Stolzenbach, 2017) curriculum during an after-school program. Nearly all of the youth were Hispanic, and all were living in a poverty-stricken area of the urban south. The *Mind Matters* program incorporates recent neuroscience to teach youth about the impact of trauma on health and the brain, as well as imparts skills with regard to mindfulness meditation, emotion regulation, goal setting, and help-seeking. We asked youth in post-curricular focus groups to speak to the program’s acceptability, what they had learned, and what recommendations they had to improve the program. We then followed up with individual youth during the COVID-19 pandemic to understand whether and how they were



utilizing the skills to cope and be resilient.

Dialogue regarding program acceptability found that youth enjoyed the curriculum and were able to apply it to their daily lives and across ecological contexts to include school, home, work, and among peers. This is important, particularly since it suggests applicability of the program content to Hispanic youth of various ages (i.e., 6<sup>th</sup>-12<sup>th</sup> grade). The ethical codes of multiple helping professionals speak to the importance of evoking a culturally competent framework, which includes understanding the perspectives of those served through interventions (e.g., National Association of Social Workers, 2015). Rather, a growing body of research regarding mindfulness based interventions has primarily focused on White, middle-to upper-class women (Woidneck et al., 2012). Culturally-adapted interventions are often more effective among minority populations (Hall et al., 2016), and a recent meta-analysis found that culturally- adapted mindfulness-based interventions were effective in reducing stress and depression among Hispanic populations (Castellanos et al., 2020). To garner even further acceptability of the *Mind Matters* program for Hispanic youth, future adaptations could incorporate Hispanic values of familism, ethnic pride, and acculturative stress (Malhotra et al., 2015).

Emotion regulation, self-soothing skills, and the impact of trauma were among the things learned most by participants. These program aspects are key components to continued resiliency-building and trauma recovery, and suggest promise for this program's further study and implementation. By understanding how chronic stress can contribute to disruptions to the nervous system, youth learned to engage in self-directed healing. That is, youth in this study were better able to identify the sources of stress in their lives, understand how these contribute to maladaptive thinking and nervous system arousal, and take steps in the moment to alter their perspectives and self-soothe. In addition to the utilization of promising body-oriented modalities, additional evidence-based protective factors are built into the *Mind Matters* program. It is noteworthy, however, that youth in this study focused exclusively on the mind and body aspects of the program at the exclusion of content on goal attainment, peer mentoring, and help-seeking. It may be that the somatic activities were particularly salient and novel. Given the importance of the additional topic areas, however, future evaluations

should attend to implementation factors including the extent to which each lesson was covered and youth's motivation and participation across content areas.

Finally, youth spoke to a number of areas for program improvement. These included length and pace of the sessions, complexity of the content, and feelings of discomfort regarding some of the topic discussions. The context in which the program was delivered is an important consideration; coming directly from school to an after-school program, youth may have had difficulty sitting and further concentrating. In lieu of this, it is noteworthy that students chose to be part of the program rather than engage in other sports and activities offered. We recommend that, if time permits, practitioners consider the use of the (21 as opposed to 12) abbreviated lesson plans offered by the Dibble Institute (2018), or build from the lesson on exercise which is part of the curriculum and practice some movement before each session. Further, per youth's recommendations, practitioners utilizing this program may want to include empathy- and trust-building activities in an outside environment. Again, building empathy and loving kindness is a lesson covered by the curriculum but the group dynamics of youth in our study suggest that it may need additional coverage. Particularly among impoverished communities, at least some youth are likely to be experiencing abuse or other forms of chronic stress in their homes, and creating a safe learning environment for youth is essential. One of the advantages to delivering this program in an after-school setting was that a case manager worked directly with families and youth and protocols were clearly outlined and discussed with youth in regard to potential disclosure. No matter the setting, it will be continue to be important for practitioners delivering the program to be trained in trauma informed care.

Given the timing of the COVID-19 pandemic, we had a unique opportunity to follow youth three months after the in-person delivery of the program to assess how coping skills were being utilized. Individual youth were able to freely recall many of the mindfulness techniques practiced in the program, highlighting the benefit of conducting interviews following an extended period of time as well as the sustained effects of the program itself. Youth discussed how the skills they had learned resulted in stress relief from doing schoolwork online and being home all day with family. All but one youth said that they would participate in the group again if given the opportunity; the youth who

voiced hesitancy noted that her peers were disruptive, which made it difficult to relax. Taken together with focus group findings which elucidated an incidence of bullying, practitioners should understand how antisocial behavior can be reinforced within group settings (i.e., deviancy training; Dishion et al., 2001). Indeed, numerous studies have cited both positive effects of intervention alongside iatrogenic effects (see Dishion & Dodge, 2005). The content covered by the *Mind Matters* program, to include adverse childhood events (ACEs), requires skillful leadership and continued support of youth both inside and outside of the classroom.

### **Strengths and Limitations**

This study reflected the felt needs of the community to address the trauma experienced by youth in an impoverished urban area of the South, and findings are not necessarily generalizable to other settings. We worked closely with the youth-serving agency to choose the *Mind Matters* program and were drawn to its strengths and resiliency-based approach to recognizing, coping with, and healing trauma. Part of this approach also entailed building human capital within the agency by training Master of Social Work interns about trauma and in delivery of the program. This study provides valuable information to researchers and organizations wishing to utilize the *Mind Matters* curriculum as a part of their program, but further studies with larger sample sizes and a comparison group are necessary in order to determine its efficacy. Further, the number of youth that we were able to track through the pandemic was small. It may be that some youth had additional challenges during the pandemic (e.g., moving) that might have negatively impacted their ability to practice the skills taught. Moreover, youth who were interviewed during the pandemic may not have been able to speak freely with parents in the home. Particularly given that at least one youth had experienced domestic violence, this may have been a hindrance to safely practicing skill sets or discussing what she had learned. Importantly, any program that seeks to teach youth about trauma and to build resiliency skills must consider the impact of structural and historic inequality on neighborhoods of color and integrate critical discussion of larger societal systems. It follows that future research should also assess practitioners' and agency perspectives. By implementing the *Mind Matters* program in response to a

community-based needs assessment, and with wrap-around case management services, the goal of building resiliency included widespread advocacy efforts for both youth and families.

## **Conclusion**

Having close relationships with caring adults and access to supportive relationships are social protective factors that contribute to youth's development of resiliency (Masten & Reed, 2002; Ungar et. al., 2008). Children and youth can benefit tremendously from building resiliency, which helps to mitigate stress and contributes to overall well-being (Wong & Wong, 2012). Particularly for youth living in poverty, these skills are important to reduce lifelong risk of physical and behavioral health issues (Poulton et al., 2002). This preliminary qualitative study supports the use of *Mind Matters* among middle schoolers and high schoolers in after- school settings. Youth articulated enjoyment of the program and were able to offer examples of how they had utilized the skills they learned in the context of their daily lives. Importantly, these skills helped them to cope and continue to build resilience in the midst of being homebound during the COVID-19 global pandemic.

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**Data Availability** Data from this study are available per request by emailing the first author.

## **Declarations**

**Conflict of Interest** On behalf of all authors, the corresponding author states that there is no conflict of interest

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