Evaluating the effectiveness of The Body’s Story in Building Resilience in School-aged Children Exposed to Violence

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Abstract

ABSTRACT

Evaluating the effectiveness of The Body’s Story in Building Resilience in School-aged Children Exposed to Violence

Sara Onuma Kotzin, University of Pennsylvania

Dr. Phyllis Solomon, Dissertation Chair, University of Pennsylvania

Dr. Victoria Frye, Dissertation Committee Member, The City College of New York

Objective: The trauma associated with children's exposure to violence (CEV) in the home, school and community, includes a complex web of emotional, social, and academic ruptures, which can derail healthy development if left unaddressed. Applying the tenets of a public health response to this complicated social problem, The Body’s Story was developed as a short-term structured modality promoting somatic awareness, emotional connection and self-regulation through play and story. The study hypothesized that elementary public school children who participated in the universal, trauma-responsive, clinician-led intervention, The Body’s Story, would have a greater increase in resilience and a greater decrease in symptoms of trauma when compared to the control group who received a modified social emotional learning (SEL) program. A trauma-informed training for teachers and supporting staff was hypothesized to enhance the benefits of The Body’s Story intervention and the modified SEL.

Methods: The intervention was studied as an exploratory pilot program using a quasi-experimental group design with twenty-six children (n=12 experimental intervention; n=14 control condition) in the sample. Measures employed were the Strengths and Difficulties Questionnaire - Child Form (SDQ-Child) and Adult form (SDQ-Adult) and The Child’s Hope Scale (CHS) as pre-and post-test questionnaires, at baseline, termination and one-month follow-up. Bivariate and multivariable tests were used to test the impact of the intervention on the SDQ and CHS.

Results: The pre-and two post-test scores did not show any statistically significant difference between the intervention and the control groups in increasing resilience nor a decrease in symptoms of trauma after participating in The Body’s Story as hypothesized.

Conclusion: These findings are understood with the acknowledgement that this is a new domain of study and there has been little research on the effectiveness of classroom-based trauma-informed approaches. Research examining multi-disciplinary approaches points to the need for trauma-informed practice to be delivered in schools in a comprehensive, collaborative and flexible way to address the complicated effects of trauma on youth within a frame of strength and resilience. Implementing a brief program in a setting not already trauma-informed, may have conflicted with the tenets of a trauma-sensitive approach, and potentially reduced the impact of the intervention. Clinical implications for school social workers include support for integrating a trauma lens universally into work with students as well as training school personnel in order to normalize a trauma-sensitive culture throughout educational institutions is discussed.
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Evaluating the effectiveness of *The Body’s Story* in Building Resilience in School-aged Children Exposed to Violence

Sara Onuma Kotzin, LCSW

A DISSERTATION

in

Social Work

Presented to the Faculties of the University of Pennsylvania

in

Partial Fulfillment of the Requirements for the

Degree of Doctor of Social Work

October 8, 2017

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DEDICATION

I dedicate this project to Papa, the ultimate storyteller.
ACKNOWLEDGEMENTS

The day before my defense, my 8 year old asked in earnest, “So, are we done now?” The “we” was not a grammatical quirk but an accurate expression of the many investors in this process. This was truly a dissertation by committee, official and honorary.

On my official committee, I am so grateful to have had Dr. Phyllis Solomon as my advisor and chief navigator through this process. Her availability, her straightforward and steady presence, her vast knowledge and her intolerance for mediocre work, was simultaneously supportive and challenging, and ultimately so very rewarding. I was lucky to work with my second reader, Dr. Victoria Frye, and benefitted greatly from her public health perspective rooted in social justice. She consistently models how to take effective action with equal doses of passion to move and good science to ground. Dr Lina Hartcollis and Dr. Jane Abrams offered wise words and encouragement at many points along the way.

Then there is the honorary committee. My parents were among many family members and friends who were pivotal and deserve my gratitude. Melanie, Maura, Ilyon, Megan & my big brother Daniel were always a text or call away to calm and encourage or graciously distract. Chloe, Fran and David offered great patience as I bumbled through analyzing and interpreting my data. Kate of Uptown Stories, Susan, Tereza and Maya shared their time and expertise as I developed my ideas into a practical and operational curriculum. Jemise and Coco are two gems I knew long ago who showed me what the magic of resilience looks like amid the injustice of poverty and continue to motivate my work. And I never met Vivian Gussein-Paley, but her genius in developing a storytelling model for young children inspired everything that I did and wrote about here.

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ABSTRACT

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CHAPTER ONE

Background and Significance

PROBLEM STATEMENT

Children’s exposure to violence (CEV) has been identified as a public health issue for decades (Finkelhor, Turner, Ormrod, & Hamby, 2009; Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltas, 2009; Margolin, 1998; Margolin & Gordis, 2000; World Health Organization, 2005). The trauma associated with children who are witnesses to, embroiled in, and direct victims of pervasive violence in the home, school and community, includes a complex web of emotional, social, academic and developmental reactions (Delaney-Black et al., 2002; Finkelhor, Turner, Hamby, & Ormrod, 2011; Finkelhor, Vanderminden, Turner, Hamby, & Shattuck, 2014; Hickman et al., 2013; Holden, Geffner, & Jouriles, 1998). Ruptures can derail healthy development and need to be addressed less they lead to long-term deficits (Farrell & Ainscow, 2002; Lieberman, 2003).

CEV as a public health concern is complicated and insidious and the impact on children is immense and equally complicated. A comprehensive approach sends the message that violence in the community impacts, and is the responsibility of, everyone in the community (Bloom & Reichert, 2014). Applying the tenets of a public health response to this social issue requires that an intervention be accessible, universal and comprehensive (Alliance, 2012), hold a focus on prevention (Bloom & Reichert, 2014) and be provided in a trauma-informed community context (Substance Abuse and Mental Health Services Administration (SAMHSA), 2014 (Cole, Eisner, Gregory, & Ristuccia, 2013). Effective interventions for children are necessary to prevent the emotional consequences associated with exposure to violence (Cooley & Lambert, 2006; Khamis, Macy, & Coignez, 2004).
"The Body's Story" is a classroom intervention that was developed by this author to integrate elements that children need for emotional and mental health – connection, community, hope and safety (Bloom, 1995; Kinniburgh, Blaustein, Spinazzola, & van der Kolk, 2005; Landreth, 1991; Margolin & Gordis, 2000; Paley, 1991). It is a structured modality designed to serve all children in the classroom community, regardless of trauma history. Building on existing resilience by strengthening available coping and encouraging hope for the future (Khamis et al., 2004), the focus of "The Body’s Story" is supporting health and moving away from pathology.

For this study resilience was conceptualized as internal and external protective resources that can be enhanced; pro-social skills, hope and the ability to self-regulate (Masten, 2001; Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014; Werner & Smith, 2001). The symptoms of trauma being studied were anxiety, anger, depression and fear. An increase in resilience would show a decrease in trauma symptoms, and likewise, when the ability to self-regulate, connect socially and experience hope increased – in effect when resilience increased – there would be a decrease in trauma symptoms (Agaibi & Wilson, 2005; Ford & Hawke, 2012; Levine, 2005).

Among a population of elementary school children with a high level of exposure to violence, the present study addressed the following research questions:

1) Is "The Body’s Story", a universal, trauma-informed technique, more effective in increasing resilience and alleviating symptoms of trauma, than a brief and modified Social Emotional Learning (SEL) program?

2) Does trauma training for all teachers and support staff working with the children enhance and sustain the benefits of "The Body’s Story" intervention and/or the modified Social Emotional Learning program?
BACKGROUND and SIGNIFICANCE

Children Exposed to Violence

Interpersonal violence is an act that is “carried out with the intention or perceived intention of causing physical pain or injury to another person” and includes violence in the home, school and community (Gelles, 2006, p. 139; World Health Organization, 2005). While the differences between domestic violence, community violence and child maltreatment are many and meaningful, the intentional nature of all interpersonal violence unites the experiences and is the element that distinguishes them from unintentional stressors, such as natural disasters or illness (Cohen, Mannarino, & Iyengar, 2011; Margolin & Gordis, 2000). A person’s home, and by extension their community, is assumed by many to be the place one is most safe, so these forms of violence carry multi-layered impact, as they violate one’s personal safety while destroying an expectation of safety in one’s immediate environment (Margolin, 1998; Margolin & Gordis, 2000). This expectation of safety is further violated when the parent, who is expected to be the child’s protector, is less available due to the violence, or is the actual perpetrator of harm.

Children that are exposed to violence are commonly exposed to more than one type of violence throughout their childhood, referred to as poly-victimization (Dube et al., 2001; Finkelhor et al., 2011; Finkelhor, Turner, Shattuck, & Hamby, 2013; Margolin & Gordis, 2000; Turner, Shattuck, Finkelhor, & Hamby, 2015). Living within close range to the threat of gun shots or an active gang presence, being the victim of sexual abuse, or witnessing intrapersonal violence between adults in the home are all examples of the violence that many US children are exposed to on a regular basis and many in an unfortunate overlap (Finkelhor, Turner, University of New Hampshire, & United States of America, 2014). The Adverse Childhood Experiences
Study (ACEs) is one of the largest studies to date of child abuse and neglect, sampling more than 17,000 participants (Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention, 2016). Sixty-four percent of those studied reported at least one exposure out of eight categories of abuse, neglect, or household dysfunction and twelve percent reported exposure to four or more categories (Dube et al., 2001; Dube, Anda, Felitti, Edwards, & Williamson, 2002). Often the same child is further victimized in school by bullies, or inadvertently by a non-responsive system (Finkelhor et al., 2011; Substance Abuse and Mental Health Services Administration (SAMHSA), 2014).

**Effects of Exposure**

The effects of trauma among children exposed to interpersonal violence are multidimensional, varied and complicated (Arvidson et al., 2011; Cook, Blaustein, Spinazzola, & Van der Kolk, 2003; Dyson, 1990; Finkelhor et al., 2014). There have been numerous studies that look at the adverse reactions for children who have witnessed domestic violence (DeVoe & Smith, 2002; Dube et al., 2002; Fantuzzo, Mohr, & Noone, 2000; Finkelhor et al., 2014; Kitzmann, Gaylord, Holt, & Kenny, 2003; Margolin, 1998) sexual abuse (Courtois & Ford, 2009; Finkelhor & Browne, 1985; Margolin & Gordis, 2000) physical abuse (Finkelhor et al., 2013), gun violence (Fowler et al., 2009; Jouriles et al., 1998) and community violence (Cooley-Strickland, Griffin, Darney, Otte, & Ko, 2011; Fowler et al., 2009; Trickett, Durán, & Horn, 2003). Common reactions in school-age children exposed to interpersonal violence include feelings of powerlessness, terror, hyper-vigilance, anger, high arousal, anxiety, depression, and grief. These can manifest as social withdrawal, restlessness, separation anxiety, regression, aggression, tantrums, inability to focus, dissociation, isolation, conflictual relationships and

When CEV exhibit responses characteristic of trauma such as hyper-vigilance, aggression or crying episodes at school, the behaviors are almost certain to be looked at out of the context of trauma and then labeled as pathology. This happens in the classroom as well as in the mental health community. Subsequently, a disproportionate number of traumatized children get misdiagnosed with conduct disorder, ADHD, oppositional defiant disorder or generalized anxiety disorder rather than Post-traumatic Stress Disorder (PTSD) (Cook et al., 2003; Groves, 1999; McWhirter, 2011). Examining records for 63 children who were in foster care and admitted to an urban psychiatric center Dr. Kate Szymanski noted that while the children had an average of 3 traumas in his/her life, only eight percent were given a diagnosis of PTSD, while thirty-three percent had an ADHD diagnosis (Ruiz, 2014; Szymanski, Sapanski, & Conway, 2011). Similarly, after pediatrician Dr. Nicole Brown noticed a high occurrence of ADHD diagnosis in her low-income patients, she and colleagues analyzed data from the National Survey of Children's Health. Of 76,227 children with an ADHD diagnosis they found that children with the diagnosis had a higher prevalence of each ACE than children without that diagnosis, and 17% had a minimum of four ACEs (Ruiz, 2014; Brown et al., 2017). “When people don’t understand there’s a tiger in your life, it looks a lot like ADHD to them” (Ruiz, 2014, p. 31).

Observing a seven year old acting out in the classroom and taking into account the violence she witnesses at home and in her neighborhood, her behavior is still problematic and needing of
attention, but in context it can be understood as an appropriate response to trauma, maybe even
an adaptive one (Baum, 2005; Courtois & Ford, 2009; Levine, 2005). It shifts the perspective, so
rather than coming from a perch of judgment and blame and asking “‘What is wrong with you?’
we are asking ‘What has happened to you?’” (Dorado, Martinez, McArthur, & Leibovitz, 2016,
p. 164).

Getting misdiagnosed and having professionals miss the crucial trauma piece altogether
prevents the child from receiving appropriate services and places a child at risk for further
marginalization and often re-traumatization. It also skews the numbers, so that trauma continues
to be overlooked as a significant factor in the classroom (D’Andrea, Ford, Stolbach, Spinazzola,
& van der Kolk, 2012; McWhirter, 2011).

Resilience
While the impact of the trauma associated with CEV is potentially devastating to healthy
development, researchers recognize that protective factors can alleviate the impact of adverse
exposure (Agaibi & Wilson, 2005; Holt, Buckley, & Whelan, 2008; Werner & Smith, 2001).
Charles Darwin defined resiliency as “the capacity for successful adaptation to a changing
environment” (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003, p. 1). Today resilience is
understood not simply as invulnerability or flexibility, but as a dynamic process, outcome or
capacity (Masten, 2001; National Scientific Council on the Developing Child, 2015) that can
support the child towards normative development and an ability to recover from negative events
(Garmezy, 1991; Masten, 2011). Resilience is not a fixed trait but rather a complex set of
resources that can be purposefully addressed and enhanced (Baum, 2005; Flynn, Dudding, &
Barber, 2006; Masten, 2001). Increasing access to positive resources and protective factors
buffers the effects of negative material and promotes resilience and positive adaptation (Flynn et al., 2006; Masten, 2001).

Several protective features have been identified as components of resilience including the internal factors of personal power, self-esteem, self-regulation, pro-social skills, coping strategies, hope, humor, meaning and purpose. External protective mechanisms include social support, opportunities, boundaries, expectations, and empowerment (Baum, 2005; Jain & Cohen, 2013; Scales, 1999; Schultz et al., 2013). There are many links and patterns tying together features of resilience and three internal features have been highlighted in this study: pro-social skills, hope, and self-regulation. Looking at social skills as a facet of resilience, we see that individuals with consistently strong social supports and friendships are likely to have pro-social skills of cooperation, empathy and generosity (Kinniburgh et al., 2005; Kisiel et al., 2006). In regards to hope, Viktor Frankl (1985) the neurologist, psychiatrist, writer and Holocaust survivor, described the resilience he witnessed in concentration camp prisoners who actively held onto hope that “life was still expecting something from them” because, unlike happiness, an individual can take action to build hope and find meaning regardless of the external circumstances (p. 100). Teaching children that each of them has an innate ability to key into his or her inner resources is an example of identifying and building on an existing strength.

A primary aspect of self-regulation is the conscious awareness of the connection between thoughts, feelings and bodily actions and reactions (van der Kolk et al., 2014). Children who learn to identify sensation in their body and tolerate it are also likely to increase their capacity to identify and tolerate emotional awareness and affect (Warner, Koomar, Lary, & Cook, 2013). When an individual can learn to trust and tolerate the information in the body, it becomes a tool for detecting and avoiding dangerous people and situations (van der Kolk et al., 2014). Further,
self-regulation as a moderator of affect and action, significantly influences the process of setting and working to meet goals (Gestsdóttir & Lerner, 2007).

Focusing on the protections versus the pathogens has been essential in comprehending the mechanism understood as resilience (Wright & Masten, 2005). Interventions and outcomes that are embedded in the resiliency framework move towards identifying and building on the existing strengths (Geffner, Igelman, & Zellner, 2003). The goal of treatment for CEV is “restoring developmental progress” understood as “affect regulation, trust in human relationships and joy in exploration and learning” (Lieberman, 2003, slide 10). It is possible for a child to change his or her self-perception by identifying and building on even one positive factor (Gilligan, 2001) and perhaps more importantly, it may challenge the negative perceptions others have towards that child (Gilligan, 2006). “If we ask people to look for deficits, they will usually find them, and their view of situations will be coloured by this. If we ask people to look for successes, they will usually find them, and their view of situations will be coloured by this” (Kral & Center, 1988, p. 32).

**A Case for School-Based Interventions**

The developmental impact of CEV is understood as a public health issue by child development experts (Finkelhor et al., 2011; Finkelhor et al., 2014; Fowler et al., 2009; Margolin & Gordis, 2000) yet is commonly treated as a personal issue in practice. There is a “tendency to see trauma as a home problem rather than a school problem” (Cole, Greenwald O'Brien, & Gadd, 2005, p. 49). A community response sends the strong message that interpersonal violence in the community impacts and is the responsibility of, everyone in the community to address it (Yaroshefsky & Shwedel, 2015). Schools are at once the epicenter of children’s lives and the tie
to the larger community. The relationship children form with their primary school teachers due to the time spent and the nature of the relationship is extremely influential. When it is a positive influence from an adult with healthy boundaries, the consequences can be extremely beneficial and long-term (Kidder, 1989; Noltemeyer & Bush, 2013). "For children who are used to thinking of themselves as stupid or not worth talking to...a good teacher can provide an astonishing revelation. A good teacher can give a child at least a chance to feel, ‘She thinks I'm worth something; maybe I am' " (Kidder, 1989, p. 313). Schools are ideally positioned institutions to be identifying, addressing and working towards preventing the trauma associated with CEV (Haggerty, Sherrod, Garmezy, & Rutter, 1994; Jaycox, Stein, & Wong, 2014; Noltemeyer & Bush, 2013).

An intervention based on a resilience frame lends itself to a public health response aimed at addressing negative consequences and protecting and promoting current health (Bloom & Reichert, 2014). It is not always evident which child has been exposed to interpersonal violence, and though some children carry more risk factors than others, it is not possible to predict with certainty which child will be exposed to such circumstances in the future. A resilience approach is both a treatment and prevention, and therefore is appropriate to be offered to an entire classroom (Baum, 2005; Haggerty et al., 1994). Some experts deem it essential to build resilience in all children, and recommend doing so as part of a curriculum as a proactive measure (Yaroshefsky & Shwedel, 2015). “Such an approach has no down side, since children who have been exposed to trauma require it, and other, more fortunate children deserve and can also benefit from this fundamentally humanistic commitment” (Hodas, 2006, p. 40). When the skills of resilience are built in and practiced, these skills and strengths will be available for dealing with cumulative impact of trauma on a small or large scale (Berson & Baggerly, 2009).
Advocates for victims of dating violence and domestic abuse have been calling for violence prevention programming that reaches children before they enter dating age (Afolayan, 1993; (Taylor, Stein, Mumford, & Woods, 2013; Hackett, McWhirter, & Lesher, 2015). There are ‘windows of opportunity’ in a child’s development when there is a greater chance of making a lasting impact (Luthar, Cicchetti, & Becker, 2000; Masten, 2011). Like vitamins or probiotics that many people take to boost the immune system and prevent illness, resilience building can buffer children as they navigate life’s struggles; having more coping skills, more hope, support, respect and empathy are positive and protective (Haggerty et al., 1994; Geffner et al., 2003; Gresham, Elliott, Vance, & Cook, 2011).

Bringing a trauma lens to the classroom offers ways to look at reactions from a strength-based perspective versus a place of pathology. When a student acts up in the classroom, school personnel – including teachers, counselors, social workers, nurses and administrators - trained in trauma competency skills have a wider range of choices in which to understand the child’s behavior. There is always a reason for behavior and if the reasons can be more nuanced in the adult’s mind, it will impact the way that adult responds to the child. For example, children who do not feel safe at home because of violence will often act out at school because they feel safer even when they receive negative consequences. When a teacher has this information, his or her understandable frustration can be matched with true empathy-inspired patience. Then instead of labeling the child as disobedient, easily distracted or ‘making a bad choice’, the teacher can wonder what this might child have going on at home that is impacting the current presentation of behaviors.

While training teachers in trauma can help re-frame negative behaviors, it also underscores the fact that schools have the potential to contain and intentionally support the protective factors
identified as features of resilience: social support, opportunities, boundaries, expectations, and empowerment (Baum, 2005; Jain & Cohen, 2013; Scales, 1999; Schultz et al., 2013). Within this context, the classroom can be a safe haven from which all children can thrive and benefit, which is essential for children exposed to violence (Bloom, 1995; Blum, Libbey, Bishop, & Bishop, 2004). A teacher is in the position to be the caring adult, modeling healthy boundaries and offering support. Academics offer structure and, when well-executed, bring purpose and leadership opportunities and classes are communities of peers sharing an experience bringing the potential for emotional connection (Jain, Buka, Subramanian, & Molnar, 2012). “A trauma-informed approach creates space for students to build and sustain healthy, meaningful relationships with peers and teachers. The increase in physiological regulation that can come from such experiences combined with a safe setting can directly impact academic functioning” (Perry & Daniels, 2016, p. 178).

**Social and Emotional School Programs**

There are three types of school-based interventions currently found in the literature: Social Emotional Learning Programs (SELS) (delivered to all students by a classroom teacher without a trauma component), Therapeutic Trauma Groups (delivered by a clinician outside the classroom following an assessment), and Universal Trauma-informed interventions (like SELs in structure, they are typically led by the teacher to an entire classroom, but also address issues around a shared trauma). Within each category of interventions, the programs vary greatly, in size, scope and modality.

**SEL Programs**
Social Emotional Learning began as a framework to address observed fragmentation in the modern classroom. The term SEL was coined in the late 1990’s following a conference identifying the need for conflict resolution strategies in the classroom (Brackett, Rivers, Reyes, & Salovey, 2012). Social Emotional Learning programs (SELS) have been implemented in schools throughout the country and are gaining traction as educators realize the need for social, emotional and developmental learning to support academic learning (Brackett & Rivers, 2014). SEL programs are offered as part of the curriculum to an entire class, just like any lesson in math or geography. There are currently over 200 programs with varying costs, format, philosophy, amount of training and detail involved (Belfield et al., 2015; Brackett & Rivers, 2014; Domitrovich, Durlak, Goren, & Weissberg, 2013).

Formalized SEL programming - which includes Violence Prevention Programs and Peace Programs that were designed before the term was coined –was introduced to respond to an increase in violence in the classroom and to prevent early identified behavior issues from escalating as children age (Brown, Roderick, Lantieri, & Aber, 2004; Clayton, Ballif-Spanvill, & Hunsaker, 2002; Domitrovich et al., 2013; Jaycox, 2006). Generally, it has been found that lessons on emotional and social themes integrate smoothly into academic learning (Brown et al., 2004) and the programs themselves integrate well into the institution (Belfield et al., 2015). Some programs are specifically literature based, making the integration even more seamless (Brackett & Rivers, 2014; Domitrovich et al., 2013). The classroom teacher receives specialized training in the technique and a manual in order to lead his or her class in the program, which has the benefit of the leader knowing the population well (Gelkopf & Berger, 2009).

Many of the mainstream SEL materials and the studies of SEL programs acknowledge the existence of violence in the lives of the children (Clayton et al., 2002) and set goals to reduce
bullying, depression, anxiety and dating violence (Domitrovich et al., 2013; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Elias & Weissberg, 2000; Jaycox, 2006; Payton et al., 2000) and aggression, while increasing attention skills, social and emotional competence (Brackett & Rivers, 2014; Curtis & Norgate, 2007) and academic achievement (Belfield et al., 2015; Brackett & Rivers, 2014). However, there exists a problematic disconnect in this framing because while the effort to prevent further violence is explicitly stated, there are no stated objectives that address the impact of the existing violence in a child’s life, and the interventions rarely teach directly about violence (Clayton et al., 2002). Further, the word trauma is almost always absent from the literature accompanying the SEL so trauma is never explored as a cause of the behavioral issues in the classroom (Ager et al., 2011; Clayton et al., 2002; Durlak et al., 2011). The symptoms listed in SEL literature as contributing to the classroom conflicts that the SEL is aiming to address, are also symptoms of trauma, yet they are not named as such. For example, in the program Resolving Conflict Creatively, researchers identify that a goal of the program is to reduce the “risk of aggressive behavior, depression, and ADHD” which they acknowledge are three of the most ubiquitous forms of psychopathology associated with exposure to trauma and violence (Brown et al., 2004, p. 417), yet the programming does not aim to address trauma. Similarly, the SEL Program the 4Rs incorporates study results in their marketing materials that identify five positive outcomes of the program (“less aggression and less tendency to ascribe hostile motives to others, greater social competence, fewer symptoms of depression and ADHD; better attendance”) (Morningside Center for Teaching Responsibility, 2016) which are also recognized symptoms of trauma, though they also never name them as such. Not naming the trauma element reinforces the notion that behaviors like aggression or poor attendance exist in a vacuum and are not rooted in a larger socio-environmental context.
Aligned with this, the content of the mainstream SELs are focused only on existing behaviors that are causing violence among the school population, without any examination of the root of those behaviors. By skipping over the fundamental piece of acknowledging a root cause to the disruptive and negative behaviors, the implication is that there is nothing worth examining in the expressions of these children, but rather the reactions must simply cease in order to avoid causing other negative reactions. To put another way, it is as though a medical professional responded to a patient’s allergic reactions by prescribing medication, but never investigated what allergen was causing the severe response. Time and again studies find that children exposed to violence and known to be suffering from trauma, score significantly lower on academic exams in math and reading than children who have not been exposed to violence (Delaney-Black et al., 2002). An SEL that claims to be comprehensive, yet is not trauma sensitive, is ignoring an important piece of a complex puzzle.

The word “high-risk” is a widely used term that consistently appears in the literature without a clear definition, consequently leaving one to infer it’s meaning through context. Perhaps as a result of the lack of clarity, there is a glaring absence between what a program identifies as “high risk” and the roots of these behaviors. The researchers of the 4R’s program interpret poor attendance and “aggressive fantasies” with “highest behavioral risk” (Jones, Brown, & Lawrence Aber, 2011, p. 536). Similarly, every “risk factor” that the developers of the SEL, Promoting Alternative Thinking Strategies (Greenberg, Kusche, Mihalic, & Elliott, 1998) identify is also a symptom of trauma - aggressive and impulsive behavior, poor problem solving skills, social skills and academic performance, and low school commitment – yet again, sans the word trauma. The term “at risk” is used instead, which is a meaningful choice of words, as trauma refers to an experience or condition and high risk is describing the behavior. In a meta-
analysis of 213 SEL investigations, researchers argue the need for these programs by offering statistics of students engaging in multiple high-risk behaviors (“e.g., substance abuse, sex, violence, depression and attempted suicide”) that interfere with school performance (Durlak et al., 2011, p. 405). However, this analysis excluded any studies that were explicit in their inclusion of students with “preexisting behavioral, emotional, or academic problems” (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011, p. 409), all of which are known to co-occur with trauma exposure.

A report that came to conflicting conclusions on the efficacy of many of the same SEL programs was conducted in 2010 by The US Department of Education in collaboration with the CDC and the National Institute for Education Research (Ruby, Doolittle, National Center for Education Research (U.S.), Centers for Disease Control and Prevention (U.S.), & Social and Character Development Research Consortium, 2010). This study found little to no positive effect of the SELs in preventing violence or promoting peace. However, this study also omitted trauma as a factor to be explored in understanding the problematic social behavior. The premise was aligned with that of the SELs studied; that there is a deficit in the child’s social skills that “likely lead to the emergence of problem behaviors” (Ruby, Doolittle, National Center for Education Research (U.S.), Centers for Disease Control and Prevention (U.S.), & Social and Character Development Research Consortium, 2010, p. 3). More troubling was the extensive list of explanations, most of them based on research two or three decades old, which essentially lays blames with the child and/or her family: poor supervision, a child’s belief that aggression is acceptable, lack of problem-solving skills and “community disorganization” (Ruby et al., 2010, p. 3). The last factor on their list is community violence, and yet again the word “trauma” does not appear with it or anywhere in the hundred-page report. Much of the research for this
particular study was done in schools with a high percentage of students of color and in schools with high rates of poverty, factors known to correlate with trauma as “the trauma of community violence disproportionately affects highly stressed neighborhoods often inhabited by communities of color” (Dorado et al., 2016, p. 164).

Presenting the information on behavior without recognition of the context, gives the implication that negative behaviors are completely self-motivated and ignores all that is known about the high co-occurrence of CEV and high-risk behaviors (Finkelhor et al., 2013; Zilberg, Weiss, & Horowitz, 1982). Further, this narrow framing breeds racism when the population is mostly children of color and the behavior is blamed on the child or poor parenting. One of the lead researchers of the Collaborative for Academic, Social, and Emotional Learning (CASEL), currently the largest source of SEL research, surmises that it is the child’s lack of social emotional competency that leads him or her to become less connected to school, which results in poor academic performance (Durlak et al., 2011). Interestingly, the research of Robert Blum and Heather Libbey (2004; Durlak et al., 2011) cited to support this claim puts the onus for school connectedness on the adults in the school - not the child. The adults are held responsible for creating schools that provide necessary support so that every child feels seen and cared about and ultimately safe (Blum et al., 2004).

In the Sanctuary Model for treating trauma, Sandra Bloom (1995; 2000) describes culture shifts that are necessary to improve the quality of interactions among a community to bring a sense of safety. A classroom has the potential to be a safe haven (Bloom, 1995; Blum et al., 2004). It is a microcosm of the larger community, giving children the opportunity to form supportive relationships, to observe healthy interaction, and to experience emotional and academic support – all of which also promote academic and social success (Thompson & Trice-
Black, 2012). Improving the interaction among staff and students, lends itself to fostering more safety in the environment as a whole, which is an essential step for healing and fostering resilience (Bloom, 1995; Bloom, 2013; Jacobson, 2000 (Cole et al., 2013). SELs omission of a trauma-informed approach interferes with the stated goal of school being experienced as consistently safe.

The trauma lens is significant in diverting blame away from the victim, while acknowledging that dysfunctional and “high-risk” behavior can result from trauma and needs to be addressed. That distinction is an essential teaching. When trauma is divorced from the perspective, and misbehavior is understood simply as a willful choice then it leads to the misleading conclusion that the person can be “fixed” by the making positive choices outlined in a typical SEL. But what we know about trauma is that an individual’s choices have been greatly diminished and that a lot of anti-social behavior is dictated by the defense mechanisms that are helping the person to survive (Courtois & Ford, 2009). This is precisely why context is so relevant. When triggered, a traumatized child will be hyper-vigilant, tracking the behavior of others and often perceiving danger where there appears to be none. From a trauma sensitive perspective this response is expected and appropriate and requires sensitivity and compassion to support the child in experiencing the space as safe so that their nervous system can settle. But more often than not, that child is demonized and blamed, as their trauma response is seen instead as a habit of “attribution of aggression to others’ innocuous behavior” (Ruby et al., 2010, p. 3). To return to the earlier food allergy analogy, this is akin to blaming a child for getting hives, and teaching them to take medication to stop the hives, yet missing the fundamental information that hives are indicating the body is allergic to something and this response is the body’s natural and adaptive
way to notify and to attempt to expel toxins. Is the problem the hives, or is the problem the dairy
the child is given each morning that causes this reaction?

This gets to an inherent question of where to put responsibility, a common theme in
mainstream SEL programming. While personal responsibility is an important and worthwhile
virtue, making it the sole factor sends a wrong and confusing message. When a child is impacted
by interpersonal violence, accountability is almost always absent. The infamous claim of an
abusive partner, “I wouldn’t have to hit you if you just did XYZ”, or an explanation for gunshots
in the neighborhood that “he was on my turf” is common language around violence and abuse.
The lessons taught in a typical SEL at school then do not sync with the experience at home,
which can augment a child’s feelings of confusion and alienation. What does that child hear
when told by their teacher or school counselor to make a better choice? Does she/he have a
choice not to dissociate when her parents fight? Does she/he have a choice to relax when her/his
neighborhood sounds like a war zone? Standing alone, the message “you have a choice in how
to behave” could appear empowering but in the case of CEV it inadvertently reinforces the belief
that the experience is the child’s fault and their responsibility to fix. When SELs promote a goal
of helping students make choices “besides passivity or aggression for dealing with conflict”
(Brown et al., 2004, p. 188), the wording has indicated that certain behaviors are pathologized
and choices are binary. Most trauma experts would take issue with even using the word ‘choice’
with passivity and aggression, because if those reactions are trauma-related, the person does not
feel as if they have a choice. Trauma drastically impairs the child’s ability self-regulate, and
“control his or her feelings, cognitions, beliefs and actions” (Ford & Courtois, 2009, p. 16).
While it is true (and imperative) that a child can choose not to hit when feeling aggressive, she
most likely does not have control over feeling aggressive. The feelings need to be addressed if the behavior and response are to be fundamentally different.

Omitting the trauma lens and holding tightly to personal responsibility, also leads to subtle – or not so subtle - victim blaming, even if inadvertently. It sends the message that the child who is doing well can take all the credit and the child who is not, is at fault and could “fix” it if just they adhere to the program. “If the ‘problem’ is their ‘bad choices’ that means the…system is basically sound and people who are doing okay…can credit themselves for their ‘good choices’ ” (Kristof, 2015; Singer, 2015). Neither the teacher in the class nor the child acting out is making the connection between unsociable behavior and a volatile morning at home (Finkelhor et al., 2009). Learning that there is a connection between her/his behavior and the experience - and that the experience is not her/his fault - can free up a child to see that acting out makes “sense” and does not mean she/he is “bad” and then learn what other options are available to her/him. “Children must still be held responsible for their behavior and the consequences of it, but our responses to their failure can be altered” (Bloom, 1995, p. 4).

To really teach the lesson of personal responsibility it is much messier than starting with the first grader as the perpetrator. Teaching a child “it is never ok to hit when you are angry” is true, however, it is also true that a child witnessing physical violence at home is extremely angry and ill-equipped to know what to do with these high levels of totally appropriate anger. A child watching or experiencing violence is going to have an involuntary threat response: fight, flight or freeze (Levine & Kline, 2010). Often with children the fight or flight response is thwarted as it would not be safe to fight or feasible to flee from the adult. A freeze response may be the only available option. The energy that was activated by the traumatic incident and had no outlet is now revving and ready but without an opportunity to complete the response and arrive to safety.
As a result many people experience the sensation of being triggered by situations that the nervous system perceives as similar to the original threat, and then respond in an ill-advised and involuntary attempt to complete the response. This is where an adaptive response (trying to protect oneself from danger) becomes maladaptive.

Children exposed to interpersonal violence need to hear that the violence is not their fault. At the same time, they need to be explicitly taught that feeling emotion is ok, even valuable and that it can be expressed and heard in ways that are safe. Seeing behaviors as symptoms of a condition versus a personal failure is imperative, and impacts how the individual is treated and by extension how that individual responds to that. Using a trauma lens, a goal is for the child to learn a more complex truth; she/he is not inherently “bad” and that circumstances are not her/his fault, AND that she/he does have other choices available to her/his that are within her control.

Calling programs “Social Emotional Learning” and leaving out the body is a misnomer as social and emotional learning and expression are not simply cognitive activities (Mills & Kellington, 2012; Ogden, Minton, & Pain, 2006; van der Kolk, 1994). Self-regulation is an important piece that most SELs mention, however, the exercises suggested assume an audience of non-traumatized brains. We know from neurology, that the hijacking of (the part of the brain known as) the amygdala is associated with trauma and means a child cannot simply self-regulate on command (Courtois & Ford, 2009). When an event is experienced as a traumatic event, an individual’s nervous system becomes overwhelmed which impacts their ability to cope with it (Levine & Kline, 2010). Developing awareness of the body “and learning to notice, tolerate, and manage somatic experience” is essential to promote emotional regulation (van der Kolk et al., 2014, p. 2). This information will be brand new to most children and many adults and continues the quest to de-pathologize hard-wired biological reactions (Courtois & Ford, 2009; Rothschild,
Comprehensive trauma training is not even standard in most social work and counseling programs, and yet it is essential for everyone working with children today. Without including the trauma piece, the false premise remains, that behavior can all be broken into ‘good choices or bad choices’.

Since SELs are facilitated by teachers and not by clinicians the hesitation to address trauma may be due to a valid fear of opening a can of worms (Ford & Hawke, 2012). However, not addressing trauma does not mean traumatized children are not reenacting their trauma in the classroom. It simply means that the only context available for understanding and responding to their behavior, is the context provided through the SEL, which without a trauma supplement is an incomplete and therefore inaccurate picture of the situation.

SEL research typically does not measure resiliency, even though it is often one of “the implicit goals of many interventions” (Leitch, Vanslyke, & Allen, 2009, p. 16). The irony is that the SEL may be addressing and easing some symptoms of trauma as well as building resilience, but it is unrecognized due to the lack of measurement. Also, because the studies of mainstream SELs fail to draw connections to any of the trauma literature, the research is not testing if levels of traumatic symptoms have been reduced, so the information can be misleading. For example, in testing the SEL Positive Action, researchers examined normative beliefs around aggression, for instance “Is it ok or wrong to hit, shove, yell, fight other people?” (Lewis et al., 2013, p. 624). This question alone is asking about morality, and knowing the difference between right and wrong. However, if it was looked at alongside the results of The Child PTSD Symptom Scale (Foa, Johnson, Feeny, & Treadwell, 2001) for example, it might tell a different and certainly more complete story, as it gives some context to the child’s belief system and how much trauma influences those beliefs. Mainstream SELs are limited in that they are
disconnected from addressing any existing trauma in the environment they are designed to serve, however the SEL format is a logical container to hold a trauma informed technique in a universal approach.

**Therapeutic Trauma Groups**

Trauma research and treatment development is in a prolific phase, with therapies integrating the fields of psychology, social work and neurology. For example somatic psychotherapies (Leitch et al., 2009; Levine, 2005; Ogden et al., 2006), cognitive therapies (Simonich et al., 2015), EMDR (Rothschild, 2011), play therapy (Gaskill & Perry, 2015; Gil, 2012; Sori & Schnur, 2013) exposure therapy (Catani et al., 2009) and narrative therapy (Anderson & Wallace, 2015; Schauer, Schauer, Neuner, & Elbert, 2011) are just a sampling of currently evolving treatment modalities shown to be effective in treating trauma. However, there are many barriers that limit access to appropriate help, namely that those individuals and families most in need often have the least amount of resources - emotional, financial and practical - available to get that help (Brunzell, Waters, & Stokes, 2015; Huth-Bocks, Schettini, & Shebroe, 2001; Jaycox et al., 2014; Waterman & Walker, 2013).

Delivering trauma-informed interventions in a school setting makes treatment accessible and non-stigmatizing (Berger, Pat-Horenczyk, & Gelkopf, 2007; Ehntholt, Smith, & Yule, 2005). With high rates of children being exposed and the negative impact of that exposure, it is essential that the system charged with educating children creates an environment that provides trauma informed support (Simonich et al., 2015). Some children experiencing “cross-context victimization” have no safe space where they are free from the threat of harm (Finkelhor et al, 2015, p. 3). Schools have the potential to be the safe space in a child’s life, and sometimes
already are, by offering escape from the chaotic space of home life to one that is predictable and stable (Bloom, 2000; Murray & Greenberg, 2001; Stanwood & Doolittle, 2004). Ironically, some children are acting out in class precisely because it is safer to express their feelings at school than at home, but they are likely to be met with frustration and misunderstanding and get marginalized instead of nurtured (McColl, 2005).

Feeling connected to school and being among caring adults and peers are features that are essential for healing and often absent from the lives of children with poly-victimization (Blum et al., 2004; Burbridge, 2014; Finkelhor et al., 2011). Isolation is a common feature of CEV. Active abuse in the home isolates children by the imposed secrecy, a necessary ingredient employed by abusers to maintain the power and control (Farrell & Ainscow, 2002) whether the maltreatment is of the child or of an adult in the home. There is also secrecy brought on by the shame of enduring the abuse. In domestic violence, if a mother and her children can leave the violent situation then there is isolation from the abusive partner, who may be the other parent. Even if that parent was abusive and even if they feel simultaneously relieved, children still experience the loss. If the move is into a domestic violence shelter, there is further isolation from the community-at-large, extended family and other elements of the child’s world, as the location of the shelters needs to remain a secret to maintain safety for the residents and in many cases is far from home.

Keeping the secret may not even be intentional. In the case of pervasive community violence, it can feel like the norm and a child may not think it worth mentioning to a trusted adult. Also, children do not always have the words to articulate what is going on for them. A child that is going through chaos and violence at home and acting out in school is most likely unaware of the connection. This will no doubt bring further isolation in the school setting itself, which is all the
bleaker when we know the school has the potential to be the beacon. The isolation keeps a child from getting support from the safe place, which is necessary for their healing.

Group settings for trauma have the benefit of contrasting the experienced isolation with the bringing in of support and it is very reassuring for children to know others have experienced similar situations (Overbeek, de Schipper, Lamers-Winkelman, & Schuengel, 2012). Research on trauma treatment for children is still scarce compared to the literature on adults (Catani et al., 2009; de Arellano, Ko, Danielson, & Sprague, 2008; Stallard, 2006) and there is more information on interventions with adolescents than elementary school-age children (Neil & Christensen, 2009; Swanston, Bowyer, & Vetere, 2014). In developing a universal trauma informed classroom intervention for elementary school students, it was informative to look at what has been successful in middle and high school, while considering developmental differences in those populations.

School-based, trauma-informed therapeutic groups led by licensed clinicians, with components for teacher training and links to outside referrals, have shown promise. Many are rooted in a cognitive behavioral framework and include a comprehensive psycho-education piece, teaching youth about negative thoughts, the impact on the body, power and control dynamics, strategies for coping with stress, improving social skills and problem solving and managing common reactions and symptoms following trauma. Interestingly the format of many of the groups is similar to an SEL, with a week-by-week manualized curriculum. Giving trauma survivors information about these typical reactions to trauma can be an intervention as it often dispels beliefs that they are “crazy” or “damaged”. It is common for a trauma informed therapeutic treatment group to have combined elements from different programs and modalities including CBT, mindfulness, DBT and grief therapy (Mendelson, Tandon, O'Brennan, Leaf, &
play therapy, drama, art and movement (Ager et al., 2011).

Several studies have examined the benefits and obstacles of offering trauma treatment on campus (Goodkind, LaNoue, & Milford, 2010; Jaycox, 2006; Kataoka, Langley, Wong, Baweja, & Stein, 2012; Weare & Nind, 2011; Layne et al., 2001; Khamis et al., 2004; Cooley-Strickland, Griffin, Darney, Otte, & Ko, 2011). Cognitive Behavioral Intervention for Trauma in Schools (CBITS) has been tested using a quasi-experimental with new immigrants (Kataoka et al., 2003), as an RCT (Stein et al., 2003) with sixth-graders at two large schools in Los Angeles and a pilot study with Native American children (Goodkind, LaNoue, & Milford, 2010), to list a few. All of the above were with populations known to have high levels of exposure to violence, employed waitlisted control groups and were associated with modest results in the short-term (Kataoka et al., 2003; Goodkind, LaNoue, & Milford, 2010; Stein et al., 2003). Another RCT compared CBITS to a clinic-based intervention TF-CBT (Jaycox et al., 2010). After a 10-month follow-up, both groups had reduced symptoms, yet still elevated. The difference in treatments was not significant, but what was notable was the finding that 98% of the students selected for the school setting accessed and completed treatment, compared with 37% of those chosen for the clinic, underscoring the impact of school-based services ($N=195$).

In summary, CBITS was found to decrease symptoms of PTSD, anxiety, depression (Ford & Hawke, 2012; Goodkind et al., 2010; Jaycox, 2006; Kataoka et al., 2012) reduce acting out and shyness, show improvement in classroom behavior (Stein et al., 2003), increases in resilience, feelings of stability (Ager et al., 2011) and academic performance (Kataoka et al., 2012). The results of research demonstrate that addressing trauma on campus decrease incidents of strife in a classroom, and improve students’ academic achievement for the individual (Stanwood &
Doolittle, 2004; Weare & Nind, 2011). A question that surfaced repeatedly was around the maintenance of those improvements, and it is not clear if the intervention, the level of distress the child begins with, the child’s age and the services beyond the school-based programming result in the biggest impact (Goodkind et al., 2010; Kataoka et al., 2003).

An RCT with children who lived through the war in Bosnia offered treatment as a two-tiered approach to address varying levels of need in the population (Layne et al., 2001). The process of holding an initial screening of 1,279 students and follow up interviews with 209 determined to have significant risk for PTSD, helped determine which students lacked severe distress and were excluded from the study, as well as those that needed more intense services, in which referrals were given. Treatment consisted of a combination of a classroom-based program and a manualized group therapy with a trauma and grief component trauma and grief component therapy for adolescents (TGCT) while the control condition received the classroom intervention alone. In the treatment group (n=61), 58% reported a decrease in grief, and at the 4-month follow up that rose to 81%. Likewise with reduction in depression, 23% saw reduction at post treatment and 61% at follow up; with PTSD symptoms, 33% showed reduction post treatment and 48% at follow up. Taking into account the complexity of trauma and successful treatment of it, researchers echo the need to study trauma treatment over longer periods of time (Kataoka et al., 2003; Layne et al., 2001), which takes into account the long-term activation of the brain’s stress response” (Perry & Daniels, 2016, p. 177).

Therapeutic groups offer specific features that are helpful for CEV, while not appropriate in a classroom of 30 children. Most therapeutic programs are geared toward providing space for students to share details of their particular trauma within the intimacy of a small group, which reinforces safety and emotional cohesiveness (Ford & Hawke, 2012). Individuals benefit from
groups for the support, shared experience and ‘breaking the secret’ (Overbeek et al., 2012; Swanston, Bowyer, & Vetere, 2014). The small groups can ensure confidentiality in ways that cannot be promised in a large classroom of young children. School-based services provide the link to mental health that many families would not otherwise be receiving because often the greater the need, the greater the barriers to gain access to the system (Jaycox et al., 2014).

A drawback to school-based therapeutic groups is that they are unable offer a comprehensive response to address this as a public health crisis. The reliance on assessments and parental consent translates into many kids getting missed who could benefit (Goodkind et al., 2010; Khamis et al., 2004). Further, taking kids out of class to receive trauma informed services reinforces the myth that the impact of violence is not a community issue. That message does nothing to debunk the stigma around trauma and mental health issues, which is another barrier to families reaching out for services in general. Delivering this information to teachers, school mental health clinicians, administration and the wider community of students offers everyone a new and hopeful frame. Christine Courtois (2014) emphasizes the positive impact of de-pathologizing when giving the message, “It’s not you, it’s what happened to you” in her book with that title. Approaching trauma in this way aims to help the individual step back from self-blame, and offers the community another interpretation for understanding disruptive or anti-social behavior. Rather than relying on “bad” or “good” when observing a student acting out, other students may recognize a student in need of care and kindness, which may not be the obvious impulse at first glance.

There have not been studies done on providing trauma groups as part of a public health response, so the results are only comparing traumatized students with treatment or without. However, by illustrating that there is an increase in positive behaviors and a decrease in
traumatic symptoms following a therapeutic trauma group, supports the need for trauma informed programming. Accessible, trauma informed individual and group therapy is an essential piece of a public health response, but not the only response.

**Trauma-Informed Schools**

A handful of studies have been published showcasing what many refer to as the trauma-informed movement born out of the research by SAMHSA (in SAMHSA’s concept of trauma and guidance for a trauma-informed approach) and ACEs (Barila, 2015; Stevens, 2012; Substance Abuse and Mental Health Services Administration (SAMHSA), 2014). For the most part these are not specific interventions, but rather school systems engaging in deep cultural shifts to become trauma informed, much like the Sanctuary Model introduced by Sandra Bloom (1995). The trauma-informed practice at Lincoln Alternative High School, the program *Unconditional Education* (Green, 2016; Longhi, Motulsky, & Friel, 2015; Seneca Family of Agencies’, 2015) and Healthy Environments and Response to Trauma in Schools (HEARTS) (Dorado et al., 2016) CBC (Perry & Daniels, 2016) are all new examples that are comprehensive in nature and share the explicit goal of incorporating a trauma lens into an ecological framework. Unlike the literature advocating for mainstream SELs, the trauma-informed movement acknowledges in part the aim to interrupt the uniquely American phenomenon of the ‘school to prison pipeline’, “in which punitive and exclusionary disciplinary measures in schools have resulted in students of color and students with disabilities being disproportionately suspended and expelled from school and ending up in the juvenile justice and prison population” (Dorado et al., 2016, p. 163). Initiatives are emerging around the country, building on and collaborating with research that informs one another. The Trauma and Learning Policy Initiative in
collaboration with Massachusetts Advocates for Children and Harvard Law School, developed tools and guidelines called a “flexible framework”, encouraging schools to create a trauma-sensitive program that works within their own specific setting (Cole et al., 2013) in which many of these new programs are based.

However, the research to date is small scale - in one school or one school district, and mostly limited to teens – but the findings are promising. HEARTS researchers explain the link between the complexity of addressing trauma in a comprehensive way with multi-tiered intervention, in several schools over a five-year period, against the backdrop of a bureaucratic educational system, which made a fixed protocol and experimental design untenable. Researchers used a combination of self-report by staff and students along with available data such as incident reports and suspension records, referrals for disciplinary action. At one school in the study, there were 407 incidents involving physical aggression at baseline; after the 1st year HEARTS was implemented that number was down almost half, 234, and after the 5th year of consecutive implementation, the number of incidents was 58. Likewise suspensions totaled 56 before the study, 54 during the first year and a total of 3 in the 5th and final year of recording data. Similarly a pilot program in one school in New Haven, CT, implemented CBITS as part of a “trio of direct services” which employed a mixed methods approach, so as to assess the challenges of implementation are part of the study (Perry & Daniels, 2016, p. 177). Researchers point to some limitations previously noted with the cognitive behavioral intervention, in the question of longevity of effects for tools taught. Also, as noted earlier, the limits of pure trauma therapy groups include the isolation from the larger community, which in addition to potentially being stigmatizing, also cuts off potential supports. To address that, this study incorporated a
broader community element, to specifically integrate the role of classmates, teachers, families and coaches, neighbors and extended family as potential support systems.

**Universal Trauma-informed Classroom Programming**

Even within a trauma-sensitive culture, there is a need for universal classroom programming (Stevens, 2013). A classroom treated as a microcosm of the larger community provides the opportunity for supportive relationships, observing healthy interaction, and experiencing emotional and academic support – all of which promote academic and social success (Cole et al., 2013; Thompson & Trice-Black, 2012). With few exceptions, universal social emotional programs in public elementary schools in the US are not trauma-informed and the trauma-informed programming are not universal, consequently alone neither of these options is fully addressing the identified need. “The development of a classroom intervention that addresses the needs of traumatized children also requires the integration of trauma sensitive objectives” which will support the child’s social, emotional and academic development (Southwest Michigan Children's Trauma Assessment Center, 2007, p. 9). And as all children are impacted by the disorganization and conflict that results from untreated trauma in their classroom community, so do all children benefit with the rise of trauma informed programming (Sultan, 2015; Yaroshefsky & Shwedel, 2015).

Examples of evidence-based classroom interventions that are both universal and trauma informed have come out of and been implemented in environments that experienced terror, war or natural disaster and use a framework of resilience in the practice. Though treatment modalities are many and growing, there is little focus on addressing trauma in a universal setting, such as a classroom (Gelkopf & Berger, 2009). These programs have been found to effectively
address trauma and not aim to become or replace therapy (Berger et al., 2007; Gelkopf & Berger, 2009; Khamis et al., 2004; Southwest Michigan Children's Trauma Assessment Center, 2007). To date these programs have not been used to address community violence.

*Healing after Trauma skills* (HATS) emerged following the terrorist attacks of 9/11 and has thus far only been studied qualitatively (Gelkopf & Berger, 2009; Gurwitch & Messenbaugh, 2001). *The School Intervention Project* (SIP) has also only been studied qualitatively, but offers an example of a universal intervention that addresses the trauma associated with CEV in an American public school setting (Glassheim, 2006; Southwest Michigan Children's Trauma Assessment Center, 2007).

Overshadowing the Threat of Terrorism (OTT) (Berger et al., 2007), ERASE-stress (Gelkopf & Berger, 2009) and The Resilience Project (TRP) (Baum, 2005), were all designed and first studied in Israel to respond to terrorism in the context of shared traumatic events. OTT was studied in a quasi-randomized control trial (Berger, Pat-Horenczyk, & Gelkopf, 2007) with a population of 2nd graders- 6th graders with a range of terrorism-related stress. Ten classes were randomly selected for the study or the control; from there a little less than half participated, which was based on parental consent. The goals of the program were two-fold: to treat on-going symptoms of trauma through resilience building and enhance resiliency to cope with on-going threats of terror. The intervention group showed significant reductions on all measures of PTSD symptomatology, somatic complaints, and levels of separation anxiety over the waitlisted control group. Investigators also noted that none of the students receiving the intervention showed signs of worsening, suggesting that the intervention had no detrimental effect (Berger et al., 2007). Another significant finding was that younger children showed greater improvement than the older children in the study. The authors acknowledge a weakness of the study was the 46% rate
of parental consent which may have caused bias in the sample. Also the design lacked follow up
to determine if the short-term impact was maintained. Two of the investigators on the OTT
study, teamed up again to look at ERASE-Stress. The two interventions are unique in being the
only researched trauma-informed school-based programs (including therapeutic) that incorporate
body-based psychotherapy of which this researcher is aware. In this quasi-randomized
controlled trial, investigators found reductions in depression, somatic complaints and functional
problems; these reductions were maintained at the 3-month follow up. TRP evaluated teachers’
experiences using the resilience based intervention and found change in knowledge, skills and
willingness to use specific tools in the classroom (Baum, 2005).

Clinician led universal classroom programs appear to be unusually rare, especially in the US.
The Classroom Based Intervention (CBI) (Khamis et al., 2004) is a manualized and highly
structured 5-week, 15-session group intervention based on expressive-behavioral activities. The
intervention was developed by the Boston Center for Trauma Psychology and studied as a pilot
RCT in Gaza utilizing intervention and waitlisted control groups. Resiliency was measured and
operationalized as bolstering hope and pro-social skills, with goals to reduce symptoms of
traumatic stress, anxiety, fear and depression, with program strategies rooted in play and creative
problem solving. Post testing conclusions were that the intervention helped maintain and
strengthen coping and resiliency among the participants. Tests showed an increase in
communication with peers, pro-social behavior, “belief of personal responsibility and sense of
control in the case of good events, and lessening the tendency towards self-blame or doom-
thinking in the case of negative events” (Khamis et al., 2004, p. 5). Looking back to the SEL
goal of attaining a sense of personal responsibility, it is significant that in CBI, scores for
personal responsibility increased while self-blame decreased. From a trauma perspective, the
ability to see and teach these distinctions is essential (Courtois & Ford, 2009; Hackett et al., 2015). It is significant to note that CBI was studied in Gaza during on-going conflict in that region. This challenges the oft-held notion that treatment for trauma must be postponed until safety is established (Berger et al., 2007). For children in Gaza and the West Bank it was not realistic to wait until safety was established. Similarly, children living among pervasive interpersonal violence are in need of tools while their situation remains precarious.

In contrast to SEL programming that aims to reduce conflict and manage anger, a resilience-approach does not aim to ‘fix’ a problem, but rather to find and build on existing strengths (Masten, 2011). Schools cannot change the home and community environments in which child-witnesses live, but they can create a safe environment, an essential feature for healing and building resilience (Bloom, 1995; Thompson & Trice-Black, 2012). Reinforcing and increasing hope in young children’s lives tends to “sustain already existing resiliency factors and may be used as a vehicle to preserve their trust in a positive future” (Khamis et al., 2004, p. 6).

The gap that exists between the research on standard SELs and the research emerging from trauma-informed systems is therefore glaring. As SELs are growing in popularity without a trauma lens, the concern is that the paths that lead to the ‘school-to-prison pipeline’ are getting reinforced. It is curious and currently unclear to this writer, why the larger SEL programs would not be utilizing the research – especially the studies that acknowledge the existence of trauma – that is demonstrating that a trauma lens leads to increases in resilience, school connectedness, improved attendance and test scores (Longhi et al., 2015).
**The Body’s Story**

*The Body’s Story* is a trauma-informed intervention created by this author that integrates psycho-education, somatic awareness, storytelling and play. Exercises, activities and teachings were combined from several sources and disciplines to develop a 6-session manualized program for elementary school children. It was intended to be delivered to an entire class of elementary school children as a supplement to a standard year-long SEL curriculum, or to be used as a brief stand-alone, trauma-informed introduction to the topic of emotions and self-regulation when there was not an SEL in place at the school. It was designed from a public health, ecological framework, so that it is both trauma-informed and appropriate for an entire classroom of elementary school students. The foundation for the intervention is that enhancing resilience is both a form of trauma treatment and prevention. Resilience is built through identifying and then enhancing existing strengths. Children are taught to be aware of their emotions and the accompanying body sensations as important mechanisms that provide life-saving information and functions. Children who learn to identify sensation in their body and tolerate it are also likely to increase their capacity to identify and tolerate emotional awareness and affect (van der Kolk et al., 2014). This can help build self-regulation in a child who has experienced trauma, as well as be called in to prevent getting overwhelmed in a future situation (Levine & Kline, 2010). When an individual can learn to trust and tolerate the information in the body it can be a useful tool for detecting and avoiding dangerous people and situations (van der Kolk et al., 2014).

The initial phase of developing *The Body’s Story* intervention came out of a literature review on evidence-based trauma treatment, resilience, Social Emotional Learning programs (SELS), trauma-informed intervention in schools, group treatment for communal violence (terrorism), treatment of traumatized children with somatic therapies, and the study of play in healing. This
intervention was designed to fill a significant gap between SELs that are delivered universally in schools without being trauma-sensitive, and trauma specific therapeutic programs that require assessment and are delivered outside a classroom. Key areas that were identified as essential to integrate into an intervention were somatic awareness, emotional connection, and spontaneity through play, attachment and boundaries. The format borrows from storytelling-based programs, manualized treatment groups and SELs. The exercises that make up each lesson were chosen from several sources and overlapping disciplines: play therapy, occupational/sensory therapy, somatic experiencing and improvisational theater (Bloom, 1995; Bloom, 2000; Cremin, Swann, Flewitt, Faulkner, & Kucirkova, 2013; Kisiel et al., 2006; Paley, 1991; Southwest Michigan Children's Trauma Assessment Center, 2007; Stern, 2016).

*The Body's Story* integrates psycho-education and lessons on somatic awareness through play and story, which allows the lessons to be absorbed intuitively, not just cognitively, since play is the way children learn, process, communicate and self-regulate (Perry, Hogan, & Marlin, 2000). “For children to ‘play out’ their experiences and feelings is the most natural, dynamic and self-healing process in which children can engage” (Landreth, 1991, p. 10). For children living in volatile environments, free play is not always an option. In many cases a child must take on the role of the “parentified child”: protecting younger siblings, calling for help, even taking care of the injured parent, all of which interfere with the ability to play freely (Kot, Landreth, & Giordano, 1998). Knowing that trauma impacts cognition, memory and emotional expression, other modes of expression are not only valuable but also imperative (Anderson & Wallace, 2015). Play therapy has proven to be an effective treatment for traumatized children because of the developmental stage and the needs associated with that stage (Vicario, Tucker, Smith, & Hudgins-Mitchell, 2013).
The implementation of storytelling as a therapeutic tool integrates trauma theory and play therapy, to specifically address social engagement and the ability to self-regulate, central elements of resilience that are negatively impacted by exposure to violence (van der Kolk & Fisler, 1994). Children naturally use storytelling to focus, work through scenarios and understand complex ideas (Dombrink-Green, 2011; Paley, 1991). They are seeking answers and trying things out, “Will this work? What will happen if I try this? How about if I look at it in a different way?” (Lee, 2010, p. 119). The Trauma Center at Justice Resource Institute has been studying the role of theater and improvisation in addressing trauma with youth, specifically trauma around violence (Kisiel et al., 2006). Storytelling in the context of an intervention, versus free play, provides containment to the process and freedom for creativity and spontaneity within that structure. For children coming from chaotic situations, both elements are essential; children need to see boundaries set and protected, and simultaneously need an opportunity for autonomy and control (Garbarino, 1992). “Storytelling affirms students’ cultural identities by encouraging them to express and validate what they already know as they grow in what they know” (Stanley et al., 2015, p. 520). The storytelling aspect of The Body’s Story is inspired from the curriculum of veteran kindergarten teacher and Mac Arthur Genius, Vivian Gussein-Paley, whose work has been implemented as an educational tool and studied in schools throughout the United States and Great Britain (Cremin et al., 2013; Mardell, 2013). It has a simple yet specific structure, which provides consistency and the sense of containment necessary for children affected by trauma to feel safe while still allowing them the chance to play (Swick, Knopf, Williams, & Fields, 2013). While each week’s lesson builds on the previous week, it is vital that every session also be complete, with a beginning, middle and end. Gussein-Paley’s work was
done with younger children and in small groups of 4-8 children, so the technique was adapted to accommodate a larger group of slightly older children.

The storytelling feature is central to *The Body’s Story* design and the psycho-education and other exercises are built around the story, allowing the children to learn about feelings and body awareness experientially and in real-time. The students learn about their system of feelings being connected to sensation, and how this is an information gathering system. To learn that the mechanism is a resource and not a liability, allows for a shift in perspective. Many of the exercises that call on the student to practice using the body and brain together with awareness, can then be brought out of the class as tools for self-regulation and further resilience building.

The exercises are all done as a group as opposed to many practices that rely only on the self. One adaptation made to Paley’s storytelling method was to broaden the author of the story from one child to include a group of children, so there is a sense of collective ownership. In addition to learning self-regulation, the group brings about the opportunity for connection and mutual regulation (Banks, 2011), which is an essential part of healthy relationships (Banks, 2011; Brunzell et al., 2015). The communal aspect draws on another ingredient of resilience: the external supports. The group format creates a natural need for children to work together in the moment to create a story, providing the opportunity for non-verbal cooperation and role-playing, which forms the basis of social skill building, self-expression and attachment. The exercises trust the child’s imagination and rely on cooperation, specified boundaries and clear expectations. Children are given the choice not to be in a story (boundary setting) and still be treated as an important participant in the community (experiencing boundaries being honored, without being isolated).
Public Health Approach

The Body’s Story was developed as an intervention that could be integrated into a public health, trauma-sensitive framework to address the factors identified as necessary for resilience building. To that end, the program has three entry-points: 1) direct work with the students in a classroom to promote internal and external supports 2) training teachers of the school on the impact on child development when exposed to violence; teaching them about the impact of their role as an external resource, while providing tools on supporting internal resources in their students and self-care for themselves, and 3) disseminating information to the larger community, which can include parents, representatives from religious organizations and external after-school programs. (This feature was not included in this study, though building on assets in the community is still believed to be a valuable component of an ecological approach (Jain, Buka, Subramanian, & Molnar, 2012)).

Applying a public health approach to CEV honors collaboration and multiple-disciplines. There is tremendous pressure from all sides for teachers to produce high-test scores, happy children and still manage to teach the instruction in which they were trained (Brackett & Rivers, 2014). While many teachers are open to incorporating SEL into their lessons, many others are overwhelmed with what is already on their plate and feel pressure to accomplish a lot in limited time (Alisic, 2012; Hargreaves, 2000). From a public health, eco-systems approach, schools have a stake in supporting children’s emotional needs, but the responsibility for creating safe spaces needs to be distributed to all community members (Substance Abuse and Mental Health Services Administration (SAMHSA), 2014). To that end, many educators welcome a partnership with licensed mental health clinicians so that teachers can focus on doing the best with their skill-set. Introducing a universal trauma-informed classroom intervention led by a
mental health professional helps to de-stigmatize mental health and trauma, brings in a needed element of collaboration between disciplines, and does not lead with the expectation that teachers should take on another task.

Teachers are essential partners in building a trauma sensitive environment. Next to parents, teachers play the key role in a child’s development and their influence often extends beyond the classroom (Alisic, 2012; Hamre & Pianta, 2001). “Teachers usually have no way of knowing that they have made a difference in a child’s life, even when they have made a dramatic one” (Kidder, 1989, p. 313). Providing teachers with psycho-education on the effects of trauma on a child’s brain brings in a new lens for them to look at the behavior of their students; not necessarily to change it, but to expand their repertoire of responses to the behavior and to offer alternative narratives in understanding what is motivating behavior. Teachers are given tools and resources to deal with the struggles in their classroom more effectively.

In the trauma-informed system, Unconditional Education (Green, 2016) teacher training makes up a significant piece of the approach. In addition to learning about the effects of trauma on child development, teachers are taught about the impact of vicarious trauma, and are encouraged to voice some of the natural frustration and anger that comes up for them, while learning to have compassion for themselves. They are asked to look at ways that they are negatively triggered by students’ behavior and notice their own reactions in what are often intense situations. Without judgment or blame, they can examine how their response to the student impacts the student’s behavior and may in turn reinforce a negative worldview. From that place it is possible to brainstorm strategies to respond differently to difficult interactions, such as “frame feedback positively, to work on building relationships with difficult students.
outside of academics, and generally to serve as a reminder that a student’s trauma isn’t his fault” (Schwartz, 2016, p. 2).

This approach builds on a teacher’s skills while honoring their existing role and is part of making a paradigm shift from focusing on pathology to strengths (Baum, 2005; Jaycox et al., 2014). The most important change often comes from the adults’ response to CEV (Office for Victims of Crime, US Dept of Justice, Office of Justice Programs, & United States of America, 2014). A school with staff educated on the signs of trauma will be more likely to identify children that are appropriate for referrals to outside services (Perry & Daniels, 2016). Along with (and sometimes instead of) the referral for special education testing, could be a referral for specialized counseling. A successful universal trauma-informed program does not eliminate the need for a child to be referred for individual therapy or even group treatment that is specific to his or her experience, nor would that be a goal. In fact, ideally there would be more access for services as the need for such could be identified more readily. This provides another link to the community as it continues to highlight the issue of trauma as a public health issue and not one the individual bears alone.
CHAPTER TWO
Study Design and Methods

Hypothesis

Two hypotheses were tested:

1) Elementary public school children who participate in the universal, trauma-responsive, clinician-led The Body’s Story weekly in their classroom for six weeks, will have a greater increase in resilience and a greater decrease in symptoms of trauma when compared to those children who receive six weeks of a modified social emotional learning (SEL) program.

2) A trauma-informed training for all teachers and supporting staff working with the children will enhance and sustain the benefits of The Body’s Story intervention and the modified SEL.

Objective: Assessing feasibility of implementing The Body’s Story, an innovative approach to Social Emotional Learning programming not currently found in New York City schools.

Study Design Overview

The effectiveness of The Body’s Story was studied as an exploratory pilot program in an urban public elementary school using a quasi-experimental design, in two phases. Phase one began with baseline pre-testing, followed by the six-week experimental intervention, The Body’s Story and simultaneous control condition of a brief adaptation of a mainstream SEL. Phase two
of the study was a 60-minute psycho-educational training was offered to all teachers of the
school by this author, on the effects of trauma on child development. This was an opportunity to
give back to the school, in the form of professional development. For the study, it provided the
opportunity to determine if staff knowledge enhanced the impact of the experimental
intervention or the control condition. One month following the staff training, testing took place a
third and final time to measure sustainability of the intervention.

**Population and Sample**

The target population was elementary school children in a New York City public school. The
study site was a dense urban area with high levels of poverty and violence; 82% percent of the
children at this K-5th grade school qualified for free lunch (Center for New York City Affairs at
The New School, 2015). The host school was a "neighborhood school" which means that per
New York City Department of Education regulations, all students must live within several blocks
of the school, in the specific zone. The zip code in which the school resides has had high levels
of violence over the past decade (Police Department, City of New York, 2015), so it is likely that
the students have high levels of exposure to violence. The neighborhood has seen a decrease in
crime in recent years, but still reports violent crime and shootings almost twice the city average
(Police Department, City of New York, 2015). Further, a study conducted in conjunction with
Hunter College School of Social Work found that the perception of community members was
violent crime in the community was on the rise (Bellafante, 2013) and recent studies found that
New Yorkers as a whole feel less safe despite lower levels of crime statistics (Dawsey &
Shallwani, 2015; WNYC, 2015).
The ethnic composition of the host school was: 80% African American, 14% Hispanic, 3% Asian and 1% Caucasian. It was presumed that the composition of the two third-grade classes in the study would correlate with this profile. In fact, of the 12 students in the class with the experimental intervention, 11 were African-American and one was of Middle Eastern dissent. Of the 14 children in the control group all were African-American.

**Study procedures**

The school guidance counselor identified a need for more structured social and emotional learning, as it ties in with the ethos of the school. At the time of this study, all third graders had Character Building Class once a week led by the guidance counselor, in which she addressed emotional health, morals and values through reading materials, discussion, guest speakers and videos. Two years prior to this research, the host school was trained in a mainstream SEL called the RULER program through the Yale Center for Emotional Intelligence (Katulak & Fale, 2006). RULER is an acronym that breaks down elements of emotional intelligence; identifying, understanding, labeling, expressing and regulating emotions. The third-grade teachers at the host school confirmed that RULER elements were weaved into the school and classroom culture, such as meditation after lunch, classical music playing in the hallways and a student authored charter hanging in each classroom.

This study took place during Character Building Class with the guidance counselor present, as per New York City Department of Education protocol. The researcher facilitated the experimental intervention and the control condition concurrently; every student participated as part of the standard Character Building class, regardless of their participation in the study. The students and their parents had a choice as to whether to participate in the study or not and if they
were not part of the study, no data was collected on that student. Post-testing was conducted with both groups at the completion of the 6-week curricula to compare the experimental intervention with the control condition. At the first scheduled meeting, student subjects were administered two measures in one survey, which took approximately 15 minutes to complete. For the remainder of the class period, students were introduced to the tools, materials, structure and protocol of the 6-week class (which varied depending on which class they were a member of, as each intervention worked with different materials).

**Ensuring Fidelity and Controlling for Contamination**

At the onset, it was believed there was a low-risk for contamination as the two third-grade classes in the study were independent of each other throughout the school day with the exception of lunch period and recess. The guidance counselor was present for both the experimental and the control group however she did not lead the class during the 6-week interventions. When she was absent, the Vice Principal covered for her. There was a 4-week interval between the end of the intervention and the final post-test, in which the guidance counselor was once again leading her class. The guidance counselor planned to follow her curriculum closely during this interval, aware of the risk that she could contaminate the study by unconsciously integrating something from an intervention into her class.

Since the researcher was facilitating both groups, there was a clear risk of contamination. The experimental intervention and control condition both had structured lessons and activities believed to reduce the risk of elements from one intervention seeping into the other. This researcher made every effort to follow the script when leading the control condition to avoid contamination by taking detailed notes and completing a checklist following each session.
Through this process, the researcher was aware of bias and the potential for it to impact the delivery of intervention. The SEL was scripted and therefore lent itself to a neutral delivery, however the students were not following a script so when their reactions could not be addressed in the script, the researcher responded spontaneously. On two separate occasions the researcher observed the dynamic in the classroom shift following an improvised response – as a therapist she perceived that the interactions were supportive, and therefore positive but since they were not built into the intervention, they no doubt influenced the outcome.

Sample Accrual

This study was designed as a pilot with an anticipated sample size of 40 subjects. As a result of this target number, the researcher expected to be able to detect generally a medium effect with a significance level of .10. Given that this was an exploratory pilot study, we relaxed the level of significance from the usual .05. The actual sample was 26 subjects therefore the study was underpowered. The experimental (n=12) and comparison groups (n=14) were made up of close to equal numbers of children.

Key inclusion criteria

1. Subject was a student in the third grade at the host public school for the second semester of the 2015/16 school year.
2. Subject’s parent/legal guardian gave written consent; subject gave voluntary assent.

Study Duration

Taking into account pre- and post testing, the intervention and data collection, the study took four months. This included pre-testing on the first day of the intervention, followed by six
sessions, and then post-testing directly after the experimental and control classroom interventions were completed. After the post-testing, all teachers and staff of the school were invited to a 60-minute training led by this researcher on trauma and the impact on child development. One month following the staff training, the student subjects took the final post-test and the guidance counselor completed assessments on all the student subjects. All data collection was complete by June 2016.

**Retention and Data on Refusers and Drop-outs**

There is typically low attrition during a school year, so it was not expected that once a child had been enrolled in the study that he or she would have reason to drop out. However, because it was clearly explained that children’s participation was voluntary, one child vocalized his decision not to complete the final questionnaire, and another student in that class followed suit. One child was absent for the final survey and because of schedule changes it was not possible to reschedule in order to collect that data. Also six children skipped questions or, equally problematic, gave multiple answers for a question, rendering that data unusable if it accounted for more than 10% of the questions. If the student completed 90% of the survey questions, then mean substitution was done to account for missing scale items. The pre-tests for the participants that unexpectedly dropped out are still included in the data set. In the first survey, \( n = 26 \), the final survey \( n = 17 \).

**Sample Generalizability**

The specific ethnic make-up of the population of the host school does not reflect the diversity of New York City as a whole. However, the neighborhood is reflective of other communities.
throughout the US with high-crime and low economic resources, and in that way, the population is representative of children experiencing violence throughout the country. The premise was that if through this study it was found that children benefit from participating in this 6-week group, it could be introduced in other settings in hopes of offering solid treatment to a generation of vulnerable children.

Consent Process - Overview

A letter of explanation accompanied the consent form (Appendix A, B & C) that was presented to parents and guardians prior to the start date of the study. It was explained that the only difference between participating in the classroom activity and participating in the study, was the recording of data. It was explained that the data would not be used for any purpose other than measuring the effectiveness of the interventions. For confidentiality purposes numbers were used instead of names and there was no reporting on individual level data. All data was destroyed at completion of study.

All third graders in the host school were already a part of the Character Building Class with the school guidance counselor once a week. During this class the guidance counselor held discussions, created space for self-reflection, presented relevant films and brought in visitors to discuss topics and themes that the class was studying. The guidance counselor determined that The Body's Story and the modified SEL curriculum were appropriate programs to offer in her class, as the school supported the value of providing social and emotional learning.

After IRB approval, recruitment process began through the school guidance counselor, as she had a solid rapport with families and was confident that this was a successful approach. She distributed a letter of explanation to all the parents of third grade students as a hard copy in take
home folders. Parents were provided with contact information for the researcher and were encouraged to contact the researcher with any further questions. The letter explained that the only difference between the typical Character Building Class and participation in the study, was the recording of data from a child-friendly, straightforward questionnaire that would take 10-15 minutes for their child to complete, on three different dates. It was further explained that the guidance counselor would be recording a similar questionnaire based on observations of their child. It was stated that the data would not be used for any purpose other than measuring the effectiveness of the interventions and that there would not be any reporting on individual level data.

This initial recruitment resulted in only one participant, so following a meeting with the school administration, including the guidance counselor, this researcher was invited to be present in the school building on the afternoon and evening of parent/teacher conferences. This allowed the researcher to follow up in person with parents and guardians and explain details of the study and answer questions. All but one of the parents in attendance at the conference agreed to enroll their child in the study. Of those, all reported that they had received the initial letter, and many explained that the presentation of the letter (several pages, some in highly legal language) made the project sound complicated which had dissuaded them from signing. In person, the researcher was able to break down the elements of the written letter and connect with the parents and guardians. At the same time, the researcher reassured parents that inclusion in the study was optional and that their decision would have no bearing on how the family was regarded by the school. Further it was emphasized that the child would face no negative consequences if the parent decided that she or he would not be a part of the study.
All subjects were entered to win one of two $25 gift cards to Barnes and Noble. On the final day of the study, the guidance counselor held the drawing and randomly chose two students, one from each classroom.

Parents and guardians of potential subjects were given the following information as rationale:

- That the purpose of this study was to test the effectiveness of two social emotional learning techniques.
- The understanding was that New Yorkers are living in a stressful environment and that all children can benefit from building protection to deal with that stress.
- The study examined if either or both interventions helped children to focus, feel calmer, more connected to their peers in the classroom and overall more resilient.
- This study was conducted as part of a dissertation for a doctorate in social work.

For confidentiality, subject's names did not appear on measurement tools. The guidance counselor assigned a number to correspond with each subject’s name to match data and maintained a confidential master list kept locked in a file drawer. There was not any reporting on individual level data. The data entered into a database using SPSS software, a password protected file. Signed consent and assent forms were kept in a locked file in the researcher's professional office. The guidance counselor also agreed not to discuss the contents of the sessions with anyone. No names or identifying descriptors were reported and all data and forms were destroyed at completion of study.

**Potential Study Risks**
The very nature of working with children exposed to violence (CEV) brings with it the risk of triggering an unexpected emotional reaction. Any event in the school day has the potential to trigger traumatic material whether it is during reading time or recess, so the risk was well known to exist among this population. Reactions such as crying, becoming withdrawn, or agitated are commonly seen in CEV, or self-disclosing a traumatic event they have witnessed. Expressing emotion would not be considered harmful, but several precautions were considered to ensure that a child did not become overwhelmed.

1. Both the experimental intervention and control condition were delivered by a licensed clinical social worker with extensive training and experience in treating trauma.

2. The school guidance counselor, who has positive rapport with the children, was present for all sessions, and was available to take a student aside to provide additional support if necessary.

3. The intervention integrated exercises and components that are evidence-based and well-documented in comparable school populations (Bloom, 2013; Gelkopf & Berger, 2009; Kisiel et al., 2006; Mardell, 2013; Southwest Michigan Children’s Trauma Assessment Center, 2007). All elements that were utilized have been found to be containing, regulating and building blocks to creating safety. Further, no element has been found to cause harm.

4. Just as physicians have adopted the universal precautions for handling bodily fluids, as it is unknown which patients are infected, trauma-informed programming can also put this presumption in place. In this context it means adult facilitators provide unconditional respect and are conscious of honoring boundaries and not challenging a child in ways that would be shaming or humiliating (Hodas, 2006).
5. While introducing herself and the program to the children, the researcher explicitly explained that the rules in the room included: no hurting oneself, no hurting anyone else, no hurting the space. As is customary in child therapy settings, children were assured (in child friendly language) that they had *provisional* confidentiality, in that the researcher or guidance counselor would not share information outside of the classroom, *unless* a child shared an incident of being harmed inside or outside of school, and then as mandated reporters, the adult would be obligated to respond to the information.

6. *The Body’s Story* is clear in its intention to provide knowledge on emotions, teach tools for self-regulation, support resilience and not provide therapy. If a child expressed painful feelings or distress during or following the session, the facilitator was trained to offer appropriate support to help the child contain, ground and regain emotional regulation. The guidance counselor was also present and available to support an individual if they needed to leave the group for any reason.

**Experimental Intervention - The Body’s Story**

*The Body’s Story* manual was comprised of a session-by-session breakdown, outlining the session’s agenda, including theme of the day, story guidelines, discussion points and areas to review, as well as the opening and closing activities that were repeated as part of the routine each week. The list of supplies did not vary much from week to week: poster of emotions, list of sensations, newsprint and markers for writing the stories, animal and emotion dice, snow globe and on the last day, materials for the children to make their own snow globe.
Typical format of session:

1. ARRIVING: Every child was invited to stand at his or her desk, stretch, jump in place and shake out as a step to move into centering and “arriving” to this session.

2. SETTLING: Researcher shook a homemade snow globe and invited the students to watch glitter settle, while holding awareness of their own internal settling.

3. INTRO/REVIEW: Researcher introduced the day’s agenda and reviewed material from previous session

4. THEME OF THE DAY: Short lesson on a different theme each week

   First Session: Beginnings
   Second Session: Awareness of Emotions - tools and information
   Third Session: Feeling Wave - Building regulation
   Fourth Session: Finding Help & Safety
   Fifth Session: Preparing
   Sixth Session: Goodbyes

5. STORYTELLING (Mardell, 2013; Melson, 2001; Paley, 1991; Stanley et al., 2015; Stern, 2016): Each week new stories were told collaboratively, written down for the class to see, and then acted out as a group. It was explained that to be fair, a child’s name written on a popsicle stick would be selected from a bowl, and when their name was selected they could choose to tell the next part of the story or take a pass (in which case their name would go back in the hat for another time). A child always had the option to say yes or no. Two stories were completed at each session, and the goal was to let each
child have a role either storytelling or acting. Once the story was transcribed, the “actors” were selected from the hat and could choose his or her role in the story.

There was a minimum of rules (no hurting one’s self, another person or the space) but there were some additional elements included to provide containment and safety. One such element was the inclusion of animals as the protagonists and antagonists of the stories. Children typically show a natural affinity for animals, and the connection allows children a safe entry point into potentially strong feelings as it builds in personal distance (Melson, 2001). Animals also allow children a freedom with physicality that may be inhibited when being themselves.

6. PROCESSING: Following a story, a discussion took place in which the class was invited to comment on what they were feeling, as actors and as observers. Encouraging feelings identification with poster of emotions illustrated with emojis (Appendix D-II), and connecting to a list of possible sensation (Appendix D-III). Processing the felt experience allowed for an organic discussion on mirroring and empathy.

7. CALMING & CLOSING (Burbridge, 2014): At the completion of the storytelling and processing, the children were led in a technique to help them self-regulate by grounding themselves and transitioning back to their regular class. The snow globe, which was used as a bookend to start and end the sessions, was brought out and the children were asked to watch the glitter fall and notice their own internal particles settling. The repetition of the snow globe at the beginning and end of session had the goal of illustrating that emotions do change. The researcher would ask if the children could recall how it felt earlier in the hour and note the difference. Two or three children would briefly share what they noticed. This routine was predictable and announced the session was coming to a close.
Just as we deliberately “arrived” to set the session’s opening, we took a moment to recognize the closing “good-bye”.

Table 1: Elements included in the curriculum of The Body’s Story with the corresponding trauma-informed principle and the ways it was enacted in the session

<table>
<thead>
<tr>
<th>Element</th>
<th>Trauma-informed Rationale</th>
<th>Description of feature in action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety – established in the space</td>
<td>The unpredictability of trauma violates sense of physical, emotional, social safety; hyper-vigilance protection against future threat</td>
<td>Setting boundaries and containment; going over contract of behavior, routine of session and preparing for future sessions; Storytelling &amp; use of animals is protective &amp; supportive in face of stressors (Melson, 2001; Stanley et al., 2015)</td>
</tr>
<tr>
<td>Safety - future planning</td>
<td>In trauma there often was or is no safe place – the feeling of safety is essential for healthy functioning; igniting hope for resilience building</td>
<td>Stories include animals searching for a safe place. Children can imagine it for the animals, mirroring for themselves.</td>
</tr>
<tr>
<td>Psycho-education of emotions</td>
<td>De-pathologize and normalize existence of emotional reactions; distinguish between thoughts, feelings and emotions</td>
<td>Hanging chart of emotions as emoji (Appendix D-II), learning to identify emotions; concrete mini lessons repeated each week, “Emotions are felt in the body” and “Emotions can move and change”; everyone encouraged to use their face and body to show what the emotions feel like and/or do to your body (ex: furrowed brows for anger, mouth gaping for surprised)</td>
</tr>
<tr>
<td>Psycho education of somatic experience</td>
<td>Gaining the understanding that one’s body gives them valuable information, helps them survive and is a tool to help calm is important for health</td>
<td>Locate, Calculate, Communicate (Stevenson, 2014): Coloring in “gingerbread” body based on what was noticed when they did check in sensation map (Appendix D-I); Introduce SENSATION VOCABULARY BOX (Appendix D-III) to illustrate difference between emotions and sensations (ex: twitchy, butterflies, sharp, blurry, tight) (Dennison, 2013; Levine &amp; Kline, 2010;)</td>
</tr>
<tr>
<td>Psycho education of defense mechanisms</td>
<td>Defense mechanisms are adaptive and life-saving though they can manifest as dysfunction (Stullard, 2006)</td>
<td>Use stray dog example to explain defenses: based on past traumatic experiences, a dog may retreat, be aggressive or attack when approached as a means to safety; these are not friendly responses, but make sense in context</td>
</tr>
<tr>
<td>Agency &amp; empowerment – Animals in Storytelling</td>
<td>Stories provide alternate ways to “confront and defeat potential and real adversaries” (Wright, Bacigalupa, Black, &amp;</td>
<td>Animals as antagonists and protagonists; set of animal dice began the story; stories told collaboratively with classmates, written down in front of them verbatim, ideas accepted with “yes and…”; acted</td>
</tr>
</tbody>
</table>
In general, children can relate to animals in a safe way; dual purpose of providing comfort and build in distance (Melson, 2001).

<table>
<thead>
<tr>
<th>Self-regulation</th>
<th>Awareness of the body and ability to connect the mind &amp; body can bring a person back to present; gives cues as to when emotions shifting to better prepare, and have tools and time to get needs met</th>
<th>Check-in before and at the end of session. 1 minute breathing space (A.G.E.: Awareness, gathering, expanding) (Ogden et al., 2006; Siegel, 1999); end class watching snow settle, check in with their own body; learn tools for bringing back to here &amp; now through the body; counting sounds, visuals, and textures in their personal space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutual regulation (Banks, 2011)</td>
<td>Empathy, Attachment, mirroring</td>
<td>Collective process of acting out story together with emotional shifts and shared goals. The actors and audience engage in communal experience, connecting them; “our story” vs. “my story”.</td>
</tr>
<tr>
<td>Emotional tolerance</td>
<td>Expanding “window of tolerance” (Siegel, 1999) will increase ability to tolerate and regulate emotion; storytelling encourages children to express and validate their experience; supports growth (Stanley et al., 2015)</td>
<td>Discussion, giving examples of building tolerance of frustration through sports or piano practice; within the stories, chase scenes are purposefully slowed, extended or paused</td>
</tr>
<tr>
<td>Hope</td>
<td>Feature of resilience; focus on goals and the future along with sense of personal agency are components of hope that can be built upon (Noltemeyer &amp; Bush, 2013; Wright &amp; Masten, 2005)</td>
<td>Through the action of the story, characters have wishes, wants and needs; can be fulfilled, limited only by the imagination of the storytellers; can see and act out what is possible</td>
</tr>
</tbody>
</table>

**Control Condition – Modified Social Emotional Learning**

Children in the third grade (class B) at this school received six weeks of lesson plans modified from a standard mainstream SEL curriculum led by the researcher. Four of the six lessons were from the SEL designed by Morningside Center for Teaching Responsibility (2015). In week one and week six when children took pre and post-test surveys, the lesson was built on
introducing and then practicing a Community Meeting as outlined in Creating Sanctuary (Bloom, 2010; Bloom, 2013).

WEEK 1: Surveys and Introducing Community Meeting: Researcher introduced self and purpose for being there; led class through the surveys and went over rules for safety. Introduced emotions chart and Community Meeting script (Bloom, 2010), both were posted at the front of the class:

    My name is ___________ and I am a __________ (examples: soccer player, sister, New Yorker...). Right now I feel ____________ (select emotion from chart). If I need help, the grown-up in this building I could ask for help is ________. My goal or hope for today is ____________.

WEEK 2: Envisioning a kind classroom (van Woerkom, 2013): Discussion around questions, “What does kindness to each other look like? What does it feel like?” Drawing on people from their own lives who are kind, and what actions they take. Students were asked to “draw a picture of yourself respecting kindness in the classroom”. These pictures were shared as a class.

WEEK 3: Point of View (Morningside Center for Teaching Responsibility, 2011a) – Using a print out, children are asked to look in groups for who they see in the picture. Some will see an old woman first, some a young woman. Discussion on differing points of view and “is there a ‘wrong’ way to see the picture?” Exercise followed by role-plays in which different characters have a different point of view, agenda and wants.
WEEK 4: Strong, Mean and Giving In (Morningside Center for Teaching Responsibility, 2011b): The three terms were defined and discussed. Role-plays using these themes included a chance to stop action and discuss and add alternative endings.

WEEK 5: Possibilities to Think Differently (Martin, 2004): Role-plays around alternative scenarios and group brainstorming possibilities.

WEEK 6: Closings (and surveys): Took time to wrap up the program; ended with a Community Meeting; final surveys and raffle for the Barnes & Noble gift card.

Staff Training

The researcher presented a 60-minute professional development training after school on the impact of trauma on child development. All teachers, administrators and supporting school staff were invited to attend, as providing trauma informed psycho-education to all staff is necessary in creating a paradigm shift from pathology to strengths (Baum, 2005; Jaycox et al., 2014), as well as looking at all adults in a child’s community as potential helpers and shareholders in the shift (Bloom, 2013). Twelve of the teachers at the school and two support staff attended the training. In addition to offering new ways to understand what is underneath the behavior of students, the staff was provided with tools and resources to deal with the struggles in the school community more effectively. It was also recognized that they are in a challenging job and on the front lines to a lot of the stressors addressed here, so it was essential to identify the need for self-care.

Topics covered:

- Background and statistics of CEV
- Common reactions to trauma and the impact on a child’s development
• Defining trauma and PTSD with an explanation of what is simultaneously happening in the body’s nervous system (Example: Flight, fight and freeze response).

• Experiential piece of recalling their own experience as children having a positive relationship to a teacher, and connecting that to their current role in the school

• Shared goals of safe space and resilience building

• Addressed referrals, when and how to get support in responding, and mandated reporting

• Importance of and tools for self-care

Measures

Two measures were used to assess the dependent variables of resilience and trauma symptoms that were hypothesized to be responsive to The Body’s Story. Primary outcome variables included resilience (emotional health, hopefulness, pro-social behaviors, cooperation, self-control, self-regulation), anxiety, anger, fear and depression. Measurement of the primary variables was administered at three points: at baseline (at the first session of class intervention) and on the last day of classroom intervention. The week following the completion of the intervention with students, teachers and supporting school staff received the professional development training on the effects of trauma on child development. One month after the staff training, student subjects took the survey for the third and final time and the guidance counselor completed the assessments on all the subjects.

Many factors were taken into consideration when choosing the measures. The guidance counselor would be filling out measures on each student subject, in the experimental and control group, so it was essential that this task not be too burdensome. For the young children taking self-report surveys, it was considered equally important not to over burden them with too many
measures, while at the same time gathering enough pertinent information to effectively and comprehensively answer the question. The ease and feasibility of administering and taking the surveys weighed heavily in determining the measures that were selected.

The study included two scales: The Strengths and Difficulties Questionnaire - Child Form (SDQ-Child) and Adult Form (SDQ-Adult) (Goodman, 2001) and the Children’s Hope Scale (CHS) (Snyder et al., 1997).

**Resilience:** was measured with the SDQ (Child and Adult form) and the CHS. Both the child and adult versions of the SDQ are composed of 5 subscales to measure the internal and external resources that define resiliency (Daud, af Klinteberg, & Rydelius, 2008; Hall, 2015) by measuring emotional problems, behavioral problems, hyperactivity, peer problems and pro-sociality. The SDQ uses a 3-point Likert scale to indicate to what degree each attribute applies to the subject; “Not true”, “Somewhat true” or “Certainly true”. A low score on the first four subscales, and a low total “difficulty” score indicates less emotional vulnerability and was used to assess high resilience; likewise a high score on the fifth subscale of pro-social behaviors supports more resilience.

1. Emotional Problems – measures the internal resource of emotional health (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003b).
2. Peer problems – measures ability to maintain boundaries, impulse control and empathy
3. Hyperactivity/inattention – measures the ability to self-regulate, as defined by ability to focus, control one’s self physically and manage powerful emotion (Boekaerts & Corno, 2005; Ford & Hawke, 2012).
4. Peer social relationships - measures the external resource of social relationships and connection.
5. Pro-social behavior - measures consideration for other people’s feelings, helping, sharing, and caring for others. Levels of cooperation (Kisiel et al., 2006) and empathy (Kinniburgh et al., 2005) are what make up an operational definition of pro-social behavior. Increasing functional capacity and social skills (Olsson et al., 2003a) will increase the ability to self-regulate and thus bring an increase in resilience and a decrease in symptoms of trauma.

The school guidance counselor completed the SDQ-Adult for each subject. Each subject took the SDQ-Child version as a self-report. The SDQ has a total of 25 questions, which takes 8-10 minutes to complete. The SDQ has shown satisfactory reliability as indicated by internal consistency with a mean Cronbach α: .73 (Goodman, 2001) and is regarded as a technically sound and user-friendly measure. It has been used in studies internationally with positive psychometric properties (Marshall, 2001) and has shown stability in re-testing (Muris, Meesters, & van den Berg, 2003). Convergent validity has been evaluated and held up in comparison to Child Behavior Checklist and Youth Self-Report (Van Roy, Veenstra, & Clench-Aas, 2008) both of which are also used in intervention studies that measure levels of trauma and/or resilience (Khamis et al., 2004; Mendelson et al., 2015). Although the self-report was originally designed for children age 11 years old and above, further studies support that most psychometric properties are comparable with children as young as 8 years old (Muris, Meesters, Eijkelenboom, & Vincken, 2004; Van Roy et al., 2008) which was the minimum age of subjects in this study. When SDQ was tested comparing parents and/or teacher’s scores with student’s self-report, it compared favorably (Goodman, Meltzer, & Bailey, 2003).
The CHS captures levels of a child’s hope, which is the other component of resilience evaluated in this study. The CHS is a strength-based self-report measure, presented to the subject with the title “Questions About Your Goals”. It is made up of 6 brief questions, estimated to take 3-5 minutes. The CHS investigates children’s beliefs about their goals and ability to imagine achieving the goals. Subjects are asked to choose the answer that best describes their level of hopeful thinking on a 6-point Likert scale ranging from, “None of the time” up to “All of the time”. The concept of goals is broken down into two components; pathways and agency (Snyder, Hoza, Pelham, Rapoff, Ware, Danvosky, Hightberger, Rubinstein, & Stahl, 1997). Agency reflects a child’s sense that he or she can initiate action toward a goal and complete that, while pathways reflect a child’s sense that he or she is capable to create the route to these identified goals. The basis is that hopeful thoughts are dependent on an individual’s perception of how likely it is that good can happen in life and how likely it is that she can make that happen (Snyder et al., 1997). To that end, the CHS correlated significantly with feelings of self-worth and self-efficacy (Snyder, 2005).

The CHS scale has shown adequate internal consistency ranging from .72 - .86 (Valle, Huebner, & Suldo, 2004) and has been stable in retesting with large and varied samples of children (Moore & Lippman, 2006; Valle et al., 2004). In several studies the scale exhibited convergent, discriminant and incremental validity (Valle et al., 2004). In this study the Cronbach’s alpha score of .475 for the CHS suggests an unacceptable amount of measurement error, and it is therefore being excluded from analyses. The alpha score for the SDQ the students and guidance counselor completed was .84 and .82 respectively.
Symptoms of trauma: The SDQ measures levels of anxiety, anger, depression, and fear. The relationship between symptoms of trauma and self-regulation are congruent. As noted above, the SDQ measures self-regulation and social engagement, both of which are often interrupted with the experience of trauma (Buckley, Holt, & Whelan, 2007; Kinniburgh et al., 2005; Muraven, Baumeister, & Tice, 1999; van der Kolk & Fisler, 1994). When there is a decrease in trauma symptoms, the child’s ability to self-regulate will increase and likewise, when the ability to self-regulate increases, trauma symptoms will show a decrease.

The plan was that the scores from the CHS would be used to determine the degree of trauma, as it had been found to be inversely correlated to depression (Moore & Lippman, 2006), a factor congruent with symptoms of trauma. Further, when individuals are impacted by trauma the ability to imagine a future and create goals can be drastically impeded (van der Kolk, 1994), whereas children who can imagine and envision better outcomes (pathways thinking), can apply themselves to these goals (agency thinking), muster the energy to stay focused on the goal and are thus aided by their hopeful thinking (Snyder et al., 1997).

It was determined by the researcher not to implement a measure that specifically measures PTSD since the direct questions are often pointed and very likely triggering, and therefore not appropriate for this setting (Substance Abuse and Mental Health Services Administration (SAMHSA), 2014).

Analysis Plan

Bivariate and multivariable tests were used to test the impact of the intervention on the SDQ, the CHS (which has since been excluded), and each of the SDQ’s 5 subscales. T-tests comparing treatment and control groups were used to compare post-intervention scale scores in both post-
test 1 and post-test 2. T-tests were used to assess pre-intervention differences between treatment and control groups to assess pre-existing group differences that could explain post-intervention results. In addition, ordinary least squares multivariate linear regression was used to conduct a difference-in-difference analysis for each outcome, controlling for pre-intervention scores, with separate models to predict post-test 1 and post-test 2.

The impact of the Post-test 1 scores was predicted by the model:

\[
Post - test1 = \alpha + \beta_1 Treatment + B_2 Pre - Test Score
\]

The Post-test 2 scores were tested by

\[
Post - test2 = \alpha + \beta_1 Treatment + B_2 Pre - Test Score + B_3 Post - Test1 Score
\]

The experimental and control group were comparable at baseline.
CHAPTER THREE
Results

The effectiveness of the experimental intervention, The Body’s Story, was studied as an exploratory pilot program using a quasi-experimental design. The experimental intervention was compared to a modified SEL as the control intervention to assess for changes between the groups and within each group, from pre- to post-intervention for emotional health, hopefulness, pro-social behaviors, cooperation, self-control, self-regulation, anxiety, anger, fear and depression.

Clinical Intervention Outcomes

The sample was drawn from two comparable third grade classes made up of 8 and 9 year olds. The intervention group included 12 students; 7 girls and 5 boys. One child identified as Middle-Eastern and the other eleven children identified as African-American. The control group included 14 students; 5 girls and 9 boys. All members of the control group identified as African-American. Of the 26 child subjects that began the study, 3 dropped out of the final post-test, and an additional 6 subjects left more than 10% of the questions blank, or provided two answers for the same question, rendering their scores unusable. Six subjects left blanks but answered 90% of the questions in the final post-test, so mean substitution was used for the missing scale items. Final N = 17. In addition to the students taking surveys, the school guidance counselor reported on her observations of the student subjects (N=26).

There were no statistical differences between the treatment group and control group at baseline thus the two groups were considered equal at the start of the study. Assessing emotional problems, peer problems, hyperactivity and pro-social behavior as defined and
measured by the SDQ, the t-tests revealed no statistically significant differences between the experimental and the control group (Table 2).

Table 2: Scores on Strength and Difficulty Questionnaire (SD-Q)

<table>
<thead>
<tr>
<th></th>
<th>Treatment (n=12)</th>
<th>Control (n=14)</th>
<th>Total</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>SD-Q Pre-Test*</td>
<td>25</td>
<td>1.72</td>
<td>(.18)</td>
<td>1.88</td>
</tr>
<tr>
<td>SD-Q Post-Test 1</td>
<td>26</td>
<td>1.78</td>
<td>(.21)</td>
<td>1.82</td>
</tr>
<tr>
<td>SD-Q Post-Test 2</td>
<td>17</td>
<td>1.8</td>
<td>(.16)</td>
<td>1.77</td>
</tr>
<tr>
<td>T SD-Q Pre-Test</td>
<td>25</td>
<td>1.43</td>
<td>(.11)</td>
<td>1.46</td>
</tr>
<tr>
<td>T SD-Q Post-Test 1</td>
<td>26</td>
<td>1.45</td>
<td>(.10)</td>
<td>1.48</td>
</tr>
<tr>
<td>T SD-Q Post-Test 2</td>
<td>26</td>
<td>1.41</td>
<td>(.12)</td>
<td>1.46</td>
</tr>
</tbody>
</table>

* p<.10 ** p<.05 *** p<.01

Ordinary least squares multivariate linear regression was used to conduct a difference-in-difference analysis for each outcome, controlling for pre-intervention scores, with separate models to predict post-test 1 and post-test 2. As indicated in Table 3, treatment had no significant effect on post-test scores. Pre-test scores were significant contributors to the outcomes explained variance. Given these findings, the hypothesis of *The Body’s Story’s* effectiveness over the control condition for building resilience and decreasing symptoms of trauma was not supported (Table 3).

Table 3:

<table>
<thead>
<tr>
<th></th>
<th>HOPE Post-Test 1</th>
<th>HOPE Post-Test 2</th>
<th>SDQ Post-Test 1</th>
<th>SDQ Post-Test 2</th>
<th>T-SDQ Post-Test 1</th>
<th>T-SDQ Post-Test 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.604</td>
<td>0.929</td>
<td>0.665</td>
<td>1.04</td>
<td>0.116</td>
<td>0.248</td>
</tr>
<tr>
<td>Pre-Test Score</td>
<td>0.7826</td>
<td>-0.2</td>
<td>.643**</td>
<td>-0.25</td>
<td>.92***</td>
<td>.444***</td>
</tr>
<tr>
<td>Treatment</td>
<td>0.299</td>
<td>0.402</td>
<td>-0.0278</td>
<td>0.1405</td>
<td>0.032</td>
<td>-0.018</td>
</tr>
<tr>
<td>Post-Test 1</td>
<td>0.926**</td>
<td></td>
<td></td>
<td></td>
<td>.625*</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.48</td>
<td>0.57</td>
<td>0.39</td>
<td>0.63</td>
<td>0.4</td>
<td>.82</td>
</tr>
</tbody>
</table>

* p<.10 ** p<.05 *** p<.01
Feasibility:

The results indicate the intervention was moderately feasible. Implementing new trauma interventions in a public school system, especially when in a research capacity, elicits many obstacles, some bureaucratic, some cultural and many logistical (Dorado, Martinez, McArthur, & Leibovitz, 2016; Yaroshefsky & Shwedel, 2015). The design of this study anticipated many but not all of these factors, as will be discussed in greater detail. Obtaining agreement from the school administration to host the study, along with assistance in facilitating recruitment, and allowing time for a staff person to complete surveys and for teachers to attend a training led by the researcher as professional development points to areas of feasibility within the design.

Beyond the design elements, the intervention proved feasible in the execution, which is significant as this was the maiden voyage. Each session of the intervention was able to be completed in a class period and was developed with a beginning, middle and end, so when a child was absent, the child could be readily caught up in the following session. The day’s lesson and activity had enough appeal to engage the students in participation each week. All members of the class that received the experimental intervention participated in the activities, and on no occasion did a child request not to, though that option was explicitly built in. By comparison, a few members of the class with the control condition did exercise the right to decline involvement in the session activity.
CHAPTER FOUR
Discussion and Conclusion

This paper describes the rationale for the development and examination of *A Body’s Story*, a universal trauma-informed classroom intervention for school-age children with the goal of building resiliency. This innovative intervention was studied as an exploratory pilot and compared with portions of a mainstream Social Emotional Learning program (SEL). It was believed that since the experimental intervention combined features from across disciplines, integrating the most current research on treating trauma and building resiliency, it would be more effective at building resilience than a modified SEL absent of those features. The data collected from the pre-and two post-tests of 26 children did not show any statistically significant difference between the intervention group and the control group and therefore, did not support the hypothesis. The SEL from which the control group curriculum was borrowed, has been used widely and well-studied (Belfield et al., 2015; Brown, Jones, LaRusso, & Aber, 2010) but this is the first known study of it being tested within a trauma framework and specifically tested for its ability to build resilience.

Though the data did not show an increase in hope, the ability to self-regulate or a decrease in symptoms of trauma after participating in *The Body’s Story* as hypothesized, the philosophy that inspired the creation of the experimental intervention remains intact. Many leaders in the fields of public health, education and mental health are committed to a collaborative and multi-tiered approach to addressing the complicated destruction of trauma on youth (Dorado et al., 2016; Hodas, 2006; Kolbe, Collins, & Cortese, 1997; Southwest Michigan Children's Trauma Assessment Center, 2007) and within a frame of strength and resilience (Ager et al., 2011;
Australian Childhood Foundation, 2010; Brunzell et al., 2015; Cole, Eisner, Gregory, & Ristuccia, 2013; Jain et al., 2012; Stevens, 2013b). Research examining multi-disciplinary approaches point heavily to the need for trauma-informed (also called trauma-sensitive) practice to be delivered in schools in a comprehensive and flexible way (Cole et al., 2013; Dorado et al., 2016; Perry & Daniels, 2016). Based on those findings the researcher aimed to build a trauma informed intervention that could be integrated into elementary school classroom programming. The findings in this study are understood with the acknowledgement that this is a new field and there has been little research on the effectiveness of trauma-informed system approaches in school settings (Dorado et al., 2016). Furthermore, of the available studies, there are even fewer on specific classroom programs, like The Body’s Story, that are designed for elementary school students. Though the support of the hypothesis remains unsatisfactory, new and important questions for the field did emerge from this study that can inform continued exploration: How comprehensive must a trauma-informed program be to effectively support specific universal resilience building programming such as The Body’s Story? Is it possible to fill in the gaps of what is missing in a standard SEL or are the philosophies actually at odds with each other?

**Limitations of Study**

Looking at the results of this study with a focus on the mechanics and delivery against the backdrop of child development and trauma, there are many factors that may have interfered with obtaining significant results from this study.

*Sample size:*

The small sample size is one distinct element of the study that may account for a lack of statistical significance between the intervention and control groups. Some of the results that
demonstrated a slight increase may have achieved statistical significance with a larger sample. At the proposal stage, based on a discussion with the school guidance counselor, the N was anticipated to be 40, and would thus capture results for all the children in the two third grade classes at the host school (20 and 22 children respectively) and achieve moderate power. However, the starting N was 26, which is believed to have had a meaningful impact on the results. Due to the unanticipated smaller sample sizes, the research was underpowered to detect significant differences (Cohen, 1992).

In both classes, all the children participated in the experimental or control intervention, but only those with parental consent could complete the surveys. Though consent forms were sent home several times with the request for signature, only one was returned to the school through that process. The other 25 signed consent forms were obtained at the parent/teacher conference night. The requirement for consent limited the number of participants, and inadvertently skewed the sample, since participants whose parents signed consent forms were also the most connected with the school. There is a correlation between family involvement in school and child’s school performance (defined as grades, attendance and test scores) (Jeynes, 2005) and parental quality connected to levels of resilience (Masten, 2011). It is therefore plausible that the study did not include children with the lowest resiliency scores (Waters, 2017), who may have had the most opportunity to improve post-intervention.

**Duration**

The 6-week structure of *The Body’s Story* was intended to be feasible as a structured supplement that could be taught and integrated into a classroom (or other institutional setting) with relative ease, eliminating some of the common obstacles and resistance institutions have for
new programming (Belfield et al., 2015). It is possible that 6 weeks is not long enough to see an impact. Lessons from the SEL adapted for the control group were designed to last a school year, so the modified presentation may have also impacted scores for the control group. Though there are few equivalents to compare to, similar existing trauma interventions that have shown success were a minimum of 10 weeks, and some as long as 20 weeks (Baum, 2005; Berger et al., 2007; Gelkopf & Berger, 2009; Langmuir, Kirsh, & Classen, 2012).

In relation to time, another limitation may have been the short window of testing that took place, as it prevented us from learning if there had been a change with time, as the children integrated the new information (Courtois & Ford, 2009; Layne et al., 2001). Some of the information the students in the intervention group received would most likely have been new and nuanced and which takes time to integrate (Levine, 2005; Ogden et al., 2006). An example is the discussion from Week 1 and Week 2 that “feelings are felt in the body and change throughout the day”. This information was coupled with a simple ritual of “checking in” at the beginning and ending of class, and students were encouraged to take mental note of what they noticed. The language included emotions, but expanded to include sensation, “where your body feels tense, where it is comfortable”, even describing in terms of colors, shapes or textures. The abstract language is intended to open up the idea that there are not just a few choices to describe how we feel, and that the experience is unique to everyone.

The discussion also included the acknowledgement that our language and what we hear from others, does not always reflect this nuance. One student shared that people ask her, “Why you so mad all the time?” and through the exercise of checking in with her body before class and at the end of class, she realized she is not in fact mad all the time. “Sometimes I am bored when people think I am mad.” This seemingly small piece of work shifted something in her self-
perception in the moment. It would be informative to find out if a) over time she continued the practice of checking in on her own, and b) if so, did that practice increase the features that make up resilience?

Many of the elements that were taught in this program require practice, so a future study looking at resilience may look at this short-term program but test the outcome over a longer period, with the understanding that a change in resilience may not appear if only tested at four months. Possibly change may have presented in another four months, once some of the skills had more time to integrate through practice (Baum, 2005; Southwick et al., 2014). Even when programs show initial positive results, it is recognized that future follow up is essential to learn if graduates retained the information and skills acquired in the intervention (Perry 2016).

Measures

There are some elements of the design including the chosen measures that may have limited our ability to test the effects of the intervention. Like many of the design decisions, the decisions around the measures were greatly influenced by the logistics and safety concerns that exist when working within a school system. This researcher followed SAMHSA’s recommendation that measures be chosen carefully with respect to the subject’s known or anticipated trauma (Substance Abuse and Mental Health Services Administration (SAMHSA), 2014). Though the researcher was specifically looking for a decrease of trauma symptoms in children exposed to violence, it was a deliberate choice not to use surveys that tested for current levels of PTSD, such as the well-regarded Child PTSD Symptom Scale (CPSS) (Foa et al., 2001). The rationale was that the questions on such surveys are potentially triggering for students exposed to trauma, which therefore would not be emotionally supported in their school day (Acosta et al., 2012).
The questions are direct in asking the child to rate the truth regarding the statement, for example, “Having upsetting thoughts or images about the event that came into your head when you didn’t want them to” (Foa et al., 2001). Because this was in a classroom and not in a therapy session, measures of this type held the risk of opening up issues that could not be properly addressed in the setting (Cole et al., 2013) and was therefore in opposition to the goal of protecting a child’s sense of safety. Though it may have provided more effective outcome measures, even in hindsight, the researcher would not recommend the inclusion of trauma surveys in this setting with this population.

In regards to logistics, it was a high priority to keep the amount of time taking surveys to a minimum, and this criterion greatly influenced which measures were selected for the staff and children. The survey used, which included two measures for a total of 31-questions, did inspire some vocalized complaints from the students; supporting the concern that survey burden was significant. In fact, as discussed earlier, 2 students in the control group refused to complete the final survey. Technology may have been a helpful factor; answering the same questions on an iPad may have felt less arduous to the children, and could open up the opportunity to add a few more measures.

A hesitation to add more time and work to the teachers load, was another logistical consideration that led to omitting measures that could have evaluated the implementation of the program. A mixed methods approach that gathered qualitative data from the point of view of the teachers could have offered some feedback not captured here about what was perceived to be successful, not successful or was absent. Recognizing that teacher buy in is essential (Cole et al., 2013; Hodas, 2006), qualitative interviews could have helped identify how cooperative and effective the whole process was. Further, including a survey for teachers to complete following
their participation in the staff training may have provided concrete data to improve further trainings.

The measures chosen presented limitations in practice that did not appear in the literature reviewed. The Hope Scale showed high reliability across populations (Haroz et al., 2015; Snyder et al., 1997; Valle et al., 2004), and yet as discussed previously, resulted in such a low reliability score that the results could not be used. The SDQ, also heavily tested and reliable across populations, was straightforward and easy for some, while others stumbled (Daud et al., 2008; Goodman et al., 2003; Muris et al., 2003). The researcher read each question aloud, and the stronger readers were allowed to go ahead and answer on their own. Some children, despite repeatedly being asked not to talk during the surveys, spoke aloud as they answered the questions, which likely influenced their tablemate’s answers. Not all the children found the language on the SDQ straightforward and several children in both classes asked for a definition of the word “fidgety”.

Similarly, another gap in the design was not capturing information about what specifically the children learned, but rather focusing solely on what feelings, behaviors and attitudes had changed. This omission was driven by the effort to keep measures to a minimum; however, this would be a high priority to be remedied for any future research that evaluated this new intervention. A short questionnaire could test for an increase in the child’s knowledge of how emotions function, are experienced in the body and their awareness of what tools and resources they employ to help themselves decrease distress. This data on what the child learned and retained would be helpful in guiding future implementation. The researcher would have more information on what aspects of the experimental intervention were clear and what could have been explained more clearly. These areas were all covered in a verbal review at the beginning of
each session of *The Body’s Story*, as it was essential that specific teachings were clear and evident to all the students before building on them and the reactions captured were positive, though anecdotal. Testing both groups on the concrete learning would help the researcher to determine if the children in fact learned new tools for regulating emotion, gained understanding about how emotions work or an improved ability to use positive self-talk. If the children did learn these skills, but their scores for resilience were unchanged, then that could support keeping the intervention short and then testing more for a change over time. If the skills, tools and framework of thinking were in fact practiced and applied, this would lend support to the premise that significant changes take more time and practice to integrate, not necessarily to learn (Courtois & Ford, 2009).

Another advantage of including this data in a future study is that the nature of the questions is more neutral and less prone to triggering painful emotions. Within *The Body’s Story* was a discussion about safety and how the characters in the story sought out safety and what it felt like. The experience expressed anecdotally was very positive, for both the child acting out the character and the audience members watching, as they empathized with the character. A question asking the child to recall a safe place might “trigger” the memory of the story enacted by the class or their own association with safety.

Lastly, the brief measures were heavily reliant on self-report, which has inherent limitations. The guidance counselor taking the measure was chosen to help mediate that, but it is also recognized that teachers and school staff can hold bias in regards to children (Gilliam, Maupin, Reyes, Accavitti, & Shic, 2016). If it had been possible to have parents take the SDQ as well, that would have added another layer and point of view.
Disruptions in Delivery

Another ramification of a short timetable was the inability to accommodate unplanned interruptions and breaks in the routine, which had logistical and emotional consequences.

Mindful of a tight schedule, the researcher and school administration agreed upon set dates for the intervention - Mondays for the intervention group, Wednesdays for the control group - once a week consecutively over a 6-week period (not including the days for data collection which were deliberately spaced out). The start dates were carefully chosen to work around spring break and state tests, precisely to avoid breaking up the short curriculum. However, on two separate occasions the scheduled sessions had to be suddenly canceled. These were for school events that were also scheduled in advance but were not on the guidance counselor’s calendar, as typically these types of events (field trips, assemblies) would not have impacted her role.

Changes like these are not unusual for a public school, and are seemingly mundane but they caused practical damage for the study in postponements of sessions that led to the postponement of surveys. The final post survey took place during the last week of the school year, so when a child was absent, there was no way to schedule a make-up. Consequently the missing data was never obtained. Another consequence of postponed sessions was that when class resumed, more time was required to review the previous session, which shifted the content of that week’s agenda. It interrupted the momentum and consistency and diluted the material as it spread a 6-week curriculum over a 9-week period. A future study may benefit from extending the schedule of *The Body’s Story* to be a 10-12-week program to account for unforeseeable changes.

Predictability and established routines allow children to anticipate and prepare for what will come next. These are essential features for establishing safety for all children (Garbarino, 1992) and are especially true when trauma has impacted a child’s life (Huth-Bocks et al., 2001; Swick
et al., 2013). For this reason, routine was systematically built into the curriculum of *The Body’s Story* intervention, with each session repeating structures and introducing new elements within those structures (Cole et al., 2013; Southwest Michigan Children's Trauma Assessment Center, 2007). Every session began with going over the agenda and every session ended with a look ahead to what would happen next. The researcher was clear in saying “We will meet next week and we have X number of weeks left to work together”. The fact that on two occasions the class did not meet when “promised” and that there was no warning in advance, had the potential to create a rupture in the trust. Since the time of the sessions and the duration of the intervention were both short, arguably it was not enough time to repair the rupture and cement a sense of trust with the facilitator and the program (Safran, Muran, & Eubanks-Carter, 2011). The measures could not capture the direct emotional impact of the perceived ruptures, but it is quite possible it was a factor in the absence of significant results.

*Facilitation and Contamination*

This researcher was the developer of the experimental intervention, investigator of the study and facilitator of both the experimental intervention and the control, all of which opened up the possibility for unintended contamination and measurement bias (Rubin & Babbie, 2016). It was intentional in the development of the experimental intervention, that a mental health clinician would facilitate the program and not a classroom teacher, representing a key difference with the standard SELs. This decision is in line with a public health approach to address trauma, in which members of the community are viewed as partners, and counted on to fulfill their role corresponding to their own specific training (Kolbe et al., 1997). Collaboration among disciplines is often “required to develop and implement the most effective interventions,
particularly for innovative approaches” (Masten, 2011, p. 502). Relying on teachers to deliver SELs minimizes both the challenges the children are facing and the value teachers bring when free to utilize their skill and training as educators, mentors and leaders. The effort should not be to turn teachers into therapists, nor ignore that student’s need for a therapeutic approach. Rather a program that utilizes trained clinicians highlights the seriousness of the mental health needs, while respecting teachers’ strengths on the front line in the classroom and engaging them as collaborators in that effort. Even studies that are written in support of teacher-led SELs found that burnout, stress and exhaustion were not reduced by their program (Castillo, Fernández-Berrocal, & Brackett, 2013). Instead of expecting teachers to lead the intervention, a useful expectation is that teachers become trauma-informed and support the strength-based programming going on in her/his classroom, which has been shown to increase staff morale along with student resilience (Masten, 2011). Encouraging teachers to provide “relationship-based teaching is part of the therapeutic contribution to the child’s development and wellbeing” (Cole et al., 2013; Downey, 2012; Dwyer, O’Keefe, Scott, & Wilson, 2012, p. 23).

The decision for this researcher to facilitate both groups was evaluated at the proposal phase, and though some disadvantages were anticipated, it was determined they were not severe enough to deny an intervention to the control group. In this instance, had it been feasible time-wise, the participating guidance counselor, as a mental health professional and member of this school community, would have been a natural candidate to facilitate either the experimental intervention or the control. There are benefits to having a member of the staff already familiar with the children leading an intervention (Baum, 2005), her familiarity with the structure of the school and ongoing relationships with the teachers may have reduced some of the structural impediments that had deeper consequences for the study.
The researcher was confident that following a script and having a clear agenda would prevent elements from the experimental intervention seeping into the control. However, in retrospect, the risk of contamination was unintentionally minimized in the assessing phase of the study. The SEL activities chosen to be included in the control were scripted, stand-alone activities and very different from the experimental intervention, as were the talking points for discussion. However, when presented with real-time questions or comments from children not following a script, the facilitator responded in ways that were natural from years as a trauma therapist, but were not written into the SEL curriculum.

At the second session of the SEL curriculum the researcher walked the class through the activity, which included using the feelings chart (Appendix Dii) to identify an emotion. One of the participants said he did not think about emotions “as words” but rather he felt them in his body. The class laughed. This teaching is not directly addressed in the lesson chosen, but it is directly taught in the experimental intervention. The researcher took a moment to answer and was confronted with an ethical dilemma steeped in bias. One choice was to validate the child by giving an honest response which she was aware was closer to the teaching of the experiment that defines emotions as moving and changing and felt as sensations in the body. This, her own bias determined, would be a more satisfying and presumably more helpful answer to this student. Again, her specific lens informed by her training, experience and current research led her to perceive what he had said was in fact not in the least bit silly, but rather quite insightful and profound for a young child to come to on his own. She was aware that she could provide a more neutral “non-answer” to the question, which may have supported the study better by keeping the approaches distinct, but she felt that it would be at odds with her ethical commitment and overall purpose of supporting children exposed to trauma. The researcher answered as simply and
briefly as she could, which meant in effect giving a trauma informed response; validating the child on his observation of emotions being felt in the body. Following that response, she observed a positive reaction from the student and peaked interest and quieted attention from the other students.

The SEL was designed for a teacher to lead and not a clinician or trauma specialist, so if the facilitator more resembled what the designers had in mind, the response would no doubt have been different. In this study, since the design lacked a qualitative component, it led to other unanswerable questions, as there was no way to capture that in the data. Did that interaction, and perhaps other undetected exchanges like it, improve the outcome of the SEL so that it performed as well as the experimental intervention? At the same time, the overall design and decision to use a control condition it is possible that it was difficult to isolate an effect of the experimental intervention because of the strength of a control arm.

**The Tension between Trauma-informed & Feasibility**

“We want rainbows without the rain, diversity without the difference, and justice without talking about the injustice” (Stevenson, 2013, p. 4)

Decisions around feasibility are common and necessary when designing any study, as there are always limits to a research team and the institution or participants being studied (Rubin & Babbie, 2016). In addition to informing areas of the design and implementation, the development of the intervention itself was informed by considerations for feasibility and practical constraints. The intervention was developed with the understanding that a program has more chance of being welcomed into a school, if it can integrate with the existing norms and
structures. With that, an objective of this study was to determine if it is possible for a universally delivered trauma intervention to be both effective and feasible when introduced as a stand-alone program.

Shifts in education reform over the last few decades shaped by federal bills like *No Child Left Behind* and *Every Student Succeeds*, have emphasized standardized test scores, which in turn put more pressure on teachers and administrators to achieve certain marks. Teachers are expected to do more with less, and are aware that they are not able to give the time and space their students’ need (Ravitch, 2016). The SELs that have been most embraced nationwide are the ones touted as weaving seamlessly into existing school function. The vehicle of delivery for several SELS is often literacy based, which makes sense in an academic setting. The curricula of these mainstream SELs do not include a trauma lens in the approach nor do studies on them have any measures related to the impact of trauma. The improvement of grades, test scores and literacy scores are used as measures, which are valuable but limited in what they can explain about a child’s improvement. Further it reflects the values of this current education trend on academic standardization. When levels of anxiety and depression for children and burn-out and stress for teachers are tested, these have not typically been reduced by SELs (Brackett, Reyes, Rivers, Elbertson, & Salovey, 2012; Murray & Greenberg, 2001). If the desired effect is school performance, then trauma-informed studies are demonstrating that the strengths-based approach is improving resilience and emotional health and with it improving academic success (Dorado et al., 2016; Longhi et al., 2015; Mendelson et al., 2015; D. Perry & Daniels, 2016), thereby demonstrating that improving academic performance rests more on addressing the effects of trauma and institutional racism than increasing test preparation (Basch, 2011; Dorado et al., 2016; D. Perry & Daniels, 2016). It can be argued that mainstream SELs can promote feasibility
to institutions that are already feeling over-burdened because they do not address underlying issues such as trauma and racism, which require fundamental shifts in the culture. Building an intervention for a population impacted by trauma “requires change at multiples levels of an organization and systematic alignment” to address the complicated and multi-layered issues which are unresponsive to a ‘quick fix’ (Arvidson et al., 2011; D. Perry & Daniels, 2016; Substance Abuse and Mental Health Services Administration (SAMHSA), 2014, p. 16).

The research on trauma-informed and trauma sensitive programs is tied in with research on the ‘school-to-prison-pipelines’, a lot of it inspired by the ACEs study which deftly connected many public health issues to trauma (Barila, 2015; Basch, 2011; Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention, 2016; Dorado et al., 2016; Longhi et al., 2015; D. Perry & Daniels, 2016). Strict adherence to institutional norms and practices does not inspire children to associate school with safety and on the contrary has been found to be a contributing factor to children becoming re-traumatized (Bloom, 2000; Perry & Daniels, 2016). With that in mind, it is not necessarily a strength that an SEL program fits with a school, if that school system is entrenched in discriminatory, victim-blaming, shaming or other harmful practices. So, while a study needs to be mindful of the culture of a setting, there is often a need for the culture and setting to be examined. The goal of a successful program may rely on upending a problematic culture rather than promoting it. SEL research is happening parallel and often in similarly impacted neighborhoods, yet curiously is not integrating trauma into that research, nor a trauma sensitive lens into the programming.

In some ways the framework of a school-to-prison pipeline is new – the term in use under a decade – but in actuality it is just a newer conceptualization of an older issue. For over three decades Sandra Bloom has studied and written about the need and impact of the Sanctuary model
(1995), which is precisely about shifting the institutionalized culture to promote safety and functional dynamics. This spectrum of research over time reinforces the importance of building a trauma-informed structure to promote healing, sustain hope and build resilience to effect lasting and fundamental change on a cultural level (Bloom, 1995; Bloom & Reichert, 2014). To successfully implement a trauma-informed approach, the attitudes, belief systems and values that are perpetuated through the culture must be examined and acknowledged in order to address trauma in an effective way and see a shift. “Bringing a trauma lens to the…conversation is crucial to effectively addressing this societal challenge” (Dorado et al., 2016, p. 164).

This all points to a potential paradox for school administrators and teachers who are “committed to high achievement while burdened by the stressors inherent when serving marginalized communities” (Perry, p. 182). In the climate of school reform, lower performing schools, which are largely made up of lower income students’ have an increased pressure to produce academic results in order to stay open and for teachers to keep their job (Ravitch, 2016). This study recognized this dilemma and attempted to further the conversation by implementing a trauma-informed intervention that was short-term, universal and feasible, to address some of the very practical obstacles in getting trauma informed practice to an entire classroom. “Given the degree of commitment and effort required to establish and maintain a trauma informed program, barriers may often be unintentional in challenging [a] shift in paradigm” (Hodas, 2006, p. 56).

Feasibility cannot be the driving force but rather looked at as an identified obstacle to bringing change. Instead of designing interventions to fit a model of school, which we have identified as part of the problem, the larger purpose ought to be to challenge the culture and expectations of how true change can be delivered. The fact that the results do not show improvement underscores this very dilemma: Can a trauma informed program be effective and
short-term? Is making feasibility a priority colluding with the set of circumstances that need upending?

**Unanticipated Resistance**

“*Adverse Childhood Events are remarkably common. What is uncommon is the recognition and acknowledgement of them*” - Dr. Vincent Feletti (Stevens, 2012)

The host school in this study was committed to social justice and equity and these were among the reasons the school administration was open to hosting this research. The school has a functioning comprehensive mainstream SEL called RULER (Brackett & Rivers, 2014) that they had already been implementing for almost three years, with simultaneous school-wide training. Concrete features of the program were observed in their daily meditation practice, classical music playing in the hallways, mood meters and written “charters” or agreed upon behavior hanging on posters in the classroom (Brackett et al., 2012).

While SELs present an ideal structure for a classroom, they have not been tested for their ability to address trauma, nor are they trauma informed. The researcher was aware and wrote at length about gaps that were noticed in SELs that work with potentially traumatized students without any recognition of the impact or ways to address the repercussions of trauma in the programming. What became evident in practice was that the philosophy that drives an SEL can conflict with the tenets of trauma-informed systems and potentially undermine a trauma informed goal. There has been some acknowledgement that trauma needs to be addressed (Aber, Brown, Jones, Berg, & Torrente, 2011) and many SELs promote creating a sense of safety in the classroom (Brown et al., 2004; Brunzell et al., 2015; Curtis & Norgate, 2007), however, the products neglect many of the fundamentals of trauma-informed programming and consequently,
there is a strong risk that the safety is not achieved. The underlying messages stand to cancel out the benefits. One of the developers of the RULER program recently wrote a blog post about her concerns based on anecdotal reports she was receiving, that some messages of the program were in fact harmful to students of color (Simmons, 2017). She goes on to give her audience of educators suggestions rooted in a strength-based approach, for teachers to address their own bias. While the blog post aligns with a trauma-lens, and introduces a shift of adults taking responsibility, the topic of trauma was still blatantly missing from the analysis.

The general theme SELs operate on is the notion that children have a choice in their behavior and need to learn the skills to manage feelings to make better choices. This is in contrast to trauma-sensitive approaches that consider the real possibility that earlier trauma has impacted the ability to choose and therefore some children might not feel in control of their behavior (Blaustein & Kinniburgh, 2010; Pritzker & Redford, 2015). Lead developer and researcher of the RULER system defines SEL as referring to “a process for developing care and concern for others, establishing positive relationships, making responsible decisions, and handling challenging situations constructively” (Brackett et al., 2012, p. 219). There is no doubt these are all positive goals, what is questionable from a trauma perspective is placing the responsibility solely on the child to make changes. On the contrary, the goals of a trauma-informed culture focus on the work of the adults: “educators will gradually develop an awareness that traumatic experiences may be at the heart of a student’s learning, behavior, or relationship difficulties…. and will see how a trauma-sensitive environment can help children…. feel safe, connected to the school and engaged in learning” (Cole et al., 2013, p. 9).

The trauma lens is strength-based and nuanced as it removes blame, while still making the child accountable for his or her behavior. Rather than approach the child with ‘‘What is wrong
with you?’” the question becomes “What has happened to you?” (Bloom, 2013; Dorado et al., 2016, p. 164; Wisconsin Department of Health Services, 2017). Some of the differences in approach can read as simple shifts, and yet those shifts can lead to vast changes. Understanding the difference between the “learning brain and survival brain” (J. D. Ford, Grasso, Elhai, & Courtois, 2015, p. 212) can fundamentally shift the perspective and change what the observer will see.

What will the adult see? A child in a fight or flight state is physically high energy, ready, and does not have access to the part of the brain that controls decision making and rational thought. When this teacher gives directions, these may not be adhered to (Kristof, 2015). Here is where the blame can be uprooted: with a trauma lens a teacher can wonder, ‘what else might be happening?’ Humans are biologically wired to respond with a protection when triggered by the sign of danger. A child who lives with trauma is likely in a hyper-vigilant state where everything and everyone is read as potentially dangerous. Having this knowledge of the nervous system a teacher is no longer assuming the child is intentionally disobedient: a child cannot concentrate versus will not concentrate. “Fleeing bears takes precedence over doing math” (Stevens, 2012 ACES). This shift will inform the adult’s behavior - in the classroom, the Principal’s office or in the hallway with the social worker - and in response a student will respond differently. On the contrary, the perception that the child is manipulative, lazy or apathetic, influences the adult’s behavior and does not foster trust with the student, which can lead the child to internalize the same negative assessment, which is re-traumatizing (Cole et al., 2013; Hodas, 2006) and likely an escalation in behavior with the adult. It is the equivalent of a doctor consistently tapping a child’s knee with a rubber mallet, triggering the reflex to kick and then chastising the child for not controlling the involuntary reaction.
With all this in mind, it is quite possible that elements of this contradiction in philosophy impacted the effectiveness of the experimental intervention in concrete ways. This study of *The Body’s Story* was unable to fully assess the effectiveness of the intervention in part due to the inability to tease out other variables (such as institutional stressors, conflicting messages, and shaming). The elements in *The Body’s Story* around messaging, connecting to other students, and responding to negative emotions need a chance to become the norm and ideally need to be reinforced (Brunzell et al., 2015; Hopson, Schiller, & Lawson, 2014). From what could be known from observation, the school placed great emphasis on compliance, stillness and quiet in the class and in the hallways. This expectation was in direct contrast to *The Body’s Story*, an intervention built on encouraging play, movement and collaboration, raised the volume and energy level in the classroom. The strategies of discipline were not in conflict with the SEL, but were also not aligned with a trauma-informed approach (Cole et al., 2013; Hodas, 2006) and could have undermined any positive impacts of a trauma-informed intervention rooted in that framework.

It is natural and expected that the school administration would want to present well to someone coming from the outside. Though it was understood the study was anonymous and not aimed at judging, there is a natural sense that there would be judgment, especially in this situation in which the school has little control over what the researcher will observe and then think (Walker, 2017). At the end of the first class with the experimental group, when their teacher returned to the classroom, the children were reprimanded for their loud voices and for “showing disrespect” to this researcher. The researcher did not experience it that way and attempted to normalize, aware that she needed to demonstrate the consistency of message to the students and maintain their trust in this work and simultaneously try not to alienate or embarrass
the well-intentioned staff member.

This moment was complicated by many factors all of which had the potential to interfere with the goals of the intervention. First, the interaction demonstrates that there was fundamental conflict in approach, even if well-intentioned, which this researcher assumed it was. The use of shaming was observed as a tactic employed to educate and redirect students, which is known to cause people to shut down emotionally and disconnect. The trauma-informed approach used in the experimental intervention aims to show respect to a child, in hopes of increasing “that child’s sense of safety and security and thereby increases the likelihood of openness” (Hodas, 2006, p. 40).

One session the guidance counselor was absent, so another school administrator familiar with this study filled in. Following that class, the teacher began by explaining that the children had something to say to me. In unison, the class recited an apology for their behavior last class, followed up by the teacher’s assurance that it would not happen again. This marked a second potential break in trust, and the researcher found herself in the position of again attempting to balance alliance with the children with an alliance with the teacher whose home (room class) she was visiting. Following this interaction, the researcher met briefly with the teacher and guidance counselor to check in on what their concerns were, as it related to the intervention. The researcher also reached out to the administrator that had given the poor report back to the teacher. The researcher asked, “I am wondering, did you think the children were disrespectful, or did you think they were disrespecting me?” The answer was “both.” It was explained in both discussions that there was concern the children were not listening respectfully nor complying easily with the researcher, along with a more general concern about the high energy level and volume in the classroom. The researcher tried to reassure the staff that she was not experiencing
the kids’ energy levels as disrespectful, since she was asking them to express themselves organically and was aware that noise and spontaneity would come with it. However, the staff’s efforts towards ensuring the children were quiet, may have had a negative impact on the effectiveness of The Body’s Story.

This incident shed light on another blind spot on the part of the researcher during the assessment phase. The researcher had not considered in a methodical way what impact the role of being an outsider to this school could have, and specifically as a white-woman in a school comprised predominantly of people of color. Any time an outsider observes a class, teachers and staff will be motivated to have their students presented in the best light. With more attention on this natural reaction, the researcher could have built in more time to build that trust and sense of safety with the staff prior to beginning the study.

Insufficient buy-in: When programs are imposed on a teacher, regardless of how well designed or well intentioned, the outcome may be impacted by the teacher’s attitude (Brackett et al., 2012; Hodas, 2006). Making a change in approach and emphasizing teacher buy-in above all else could have shifted the dynamic exponentially. The existence of the RULER program, which seemed at the outset to be a solid foundation for a trauma-informed program to operate from, may have been a misleading clue. It is very likely that some staff in the school did not see a need to bring in a trauma-informed lens, holding the belief that because they had an SEL in place, it was redundant (Hodas, 2006) and therefore held some resistance to additional shifts in approach as introduced by The Body’s Story. Engaging the teachers could also have ensured “a balance between accountability and understanding trauma-based behaviour in discipline policies” (Australian Childhood Foundation, 2010, p. 82).
This study was predicated on the fact that standard SELs do not contain the trauma component and the hypothesis was that The Body’s Story could fill that gap by providing a trauma lens. It is more likely that without the foundation and agreed upon tenets of a trauma informed system, any benefits to the classroom program were negated.

Map forward

“Trauma-informed schools implement practices that prevent childhood trauma and that stop further traumatizing already traumatized children or adults” (Stevens, 2013a, p. 2).

The newest examples of trauma-informed universal approaches highlight the importance of building a trauma-informed structure to effect lasting and fundamental change on a cultural level through their comprehensive and multi-disciplinary approach (Dorado et al., 2016; Hodas, 2006; Stevens, 2013b) and are part of a growing movement (Pritzker & Redford, 2015; Seneca Family of Agencies’, 2015). The program developers credit the ACEs study with informing the programming and though they were developed independently, they share many fundamental values around a commitment to resilience building as an anti-dote to the toxic stress left by trauma. “Protective factors are more predictive of positive development than risks are to negative outcomes” (Jain et al., 2012, p. 108; Rutter, 1987). Even the process of researching these serious issues is assisted by the existence of hope, as community members are more willing to partner and staff more motivated to be a part of a strength-based model than one that is deficit focused (Masten, 2011).

While the studies on schools implementing these types of trauma informed approaches are finding success, they are also aware that it is not complete. “Trauma-informed practices are the
foundation for, but are not meant to replace other frameworks….it’s the bedrock for all of them” (Stevens, 2013b, p. 9). The practice of a school becoming universally trauma-informed practices provides the solid foundation to support more direct classroom interventions (Dorado et al., 2016) and *The Body’s Story* may fit into this new paradigm. The classroom is a built-in community with a system of support for children to belong, feel connected and form healthy attachments (Markin & Marmarosh, 2010). The setting itself normalizes and de-stigmatizes mental health, and further, the skills can be practiced in real time which reinforces the healing process (Gelkopf & Berger, 2009). The opportunity is there and it is up to the adults to foster it.

*The Body’s Story* brings three specific elements that have been identified as essential for healing trauma and acknowledged as missing from the foundational trauma-informed programming. *The Body’s Story* as the name implies, brings the body directly in to the intervention through play and education, creating the space to build resilience by integrating the essential and oft ignored sensory experience with the emotional and cognitive (Langmuir, Kirsh, & Classen, 2012; Ogden & Minton, 2000; Rothschild, 2011; van der Kolk, 1994). Many programs address some “cognitive and emotional elements…. but lack techniques that work directly with the physiological elements, despite the fact that trauma profoundly affects the body and many symptoms of traumatized individuals are somatically based” (Ogden & Minton, 2000, p. 149). *The Body’s Story* brings a mental health clinician into the school community as an active partner and facilitator, addressing another gap acknowledged by school staff and researchers (Jain & Cohen, 2013; Pritzker & Redford, 2015).

With few exceptions, trauma-informed programming begins in high schools, when the effects of trauma are at their most apparent, though most agree the interventions must and can start much earlier. *The Body’s Story* is an example of how clinicians can intervene in early childhood
to build resilience with a holistic, age-appropriate and communal approach (Berson & Baggerly, 2009; Langmuir et al., 2012b; Longhi et al., 2015; van der Kolk, 1994). It can be a challenge to do that comprehensively in traditional institutions, so offering that connection in a creative container holds the promise to build in resilience in a meaningful way.

**Clinical Implications of the study**

As presented, there is a lot that teachers can learn and infuse in their work in the classroom to support children impacted by trauma, and since mental health clinicians are studying and working with emotion professionally, there is an advantage to having a clinician who understands trauma lead the emotional education. Because it is so imperative that school personnel understand the dynamics of trauma, a mental health professional is a natural instructor in that case. This researcher designed a staff training specifically to provide information on what trauma is and how it might be presenting in the classroom, along with tools that a teacher can use to respond more effectively and lastly resources and evidence supporting the necessity for staff to prioritize.

Children living in chaotic homes or exposed to violence and danger on a regular basis, get flooded with cortisol to their brain so they are “on a fight-or-flight hair trigger throughout life” (Kristof, 2015). This is a defense mechanism that may prove very useful, even life-saving for a child living in a chaotic home. The important flip side is that the protective mechanism may continue to fire even when the actual threat has past. The nervous system continues to get triggered and alerted to danger even when the setting seems safe, and this hyper vigilance adversely affects that child’s ability to concentrate. “They are also so suspicious of others that they are prone to pre-emptive aggression” (Kristof & Dunn, 2014). A lot of standard SELs use the terms of controlling or managing anger as the goal. They recognize that anger and other
strong emotions are universal, but deem them as negative. The message that “being angry is bad” conflates the emotion of anger with possible behaviors that can arise out of anger. Messages like ‘it is ok to be angry’ and ‘it is not your fault’ are not included in the teaching in SELs. There is no disagreement that behavior needs to be managed in civil society, but this is not exclusive from normalizing and validating the existence of the emotion. Without the validating piece, the child that has been traumatized and lives in a state of preparation for the next threat, hears the message that “anger is bad and must be managed” and can easily interpret it as blaming. And most likely it would not be the first time they got that message. Therefore, a child whose nervous system is responding appropriately to trauma needs a safe space to be taught sensory tools to enable her/him to regulate or she/he is set up to fail and further internalize that failure.

If a teacher knew that a child had been chased to school by a saber-toothed tiger, there is little doubt that teacher would respond with compassion and have an expectation that telling the child to calm down or manage the fear or the anger would be absurd. To take this illustration further, if this unlikely event really happened, a caring adult is more likely to grab a blanket from the school nurse and maybe some chocolate milk than punish or scold. Not all and not always, but often the signs of trauma will be physically apparent if one is taught what to look for. The suggestion of universal precautions for trauma is precisely made because more often than not school personnel will have no idea which kids were chased to school that morning, but because of data on prevalence of community and interpersonal violence in childhood (Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention, 2016; Finkelhor et al., 2011), adults should assume some of the class have been exposed to trauma and therefore treat everyone accordingly (Hodas, 2006).
Integrating trauma sensitivity into their approach is as essential for mental health clinicians working in a school as any other staff, and it should not be assumed that clinical training alone is enough. A traditional response may be to pathologize a child’s behavior as the problem, with the belief that if it was “fixed”, conflicts and frustration would be averted, which again places the blame back on the child. This may seem counterintuitive but adopting a trauma lens is aligned with a strength-based, resilient promoting posture. Seeing hyper-vigilance as a protective mechanism versus an oppositional defiance is seeing a child in a positive light. Rather than narrowing in on “fixing” what is “wrong” with children, a strength-based approach is “about identifying and nurturing their strongest qualities, what they own and are best at, and helping them find niches in which they can best live out these strengths” (Seligman & Csikszentmihalyi, 2000, p. 6). It is a deeper adjustment that requires clinicians and educators “to move beyond flowery words of social justice and diversity and begin teaching students how to demand respectful behavior from each other” (Stevenson, 2008, p. 176).

The adults in a child’s life need to be taught and believe that anger, dissociation, and hyper-vigilance are all life-saving defense mechanisms. This truth does not negate the fact that manifested apart from a life-threatening situation (such as a typical day in the classroom) behaviors resulting from these defenses are also difficult and problematic. The complicated fact of trauma is that when a child is triggered and acts out, it is at once totally understandable and extremely difficult. Some trauma-informed programs devote considerable time to training teachers to deal with their own emotional reactions and triggers vis-a-vis the students (Green, 2016; Seneca Family of Agencies’, 2015). Even when one knows that a child cannot help acting a certain way, a teacher, a social worker, a parent, are also human beings, and cannot help feeling frustrated, resentful or anxious in regards to the children in their care, and their own coping may
be compromised (Berson & Baggerly, 2009). Trauma-informed programs vary but share a strength-based language. The organization, *Resilience Trumps ACEs*, supports schools in their efforts to bring a trauma lens to their practice. They recommend attunement steps that adults can take before responding to a child: Notice (your own feeling and the child’s), Name (put words to what is being observed), Validate (without judgment or trying to change it, express empathy), Respond (“How can I help?”) (Barila, 2015).

Training elementary school children works best in combining lessons with physicality. In leading *The Body’s Story*, the facilitator asked the class, “Is it OK to feel mad? Raise your hand if you think ‘yes’ (pause) and raise your hand if you think the answer is ‘no’”. In this researcher’s experience, most children believe the answer is no, and this was evidenced in this class by show of hands as well. The belief that anger is “bad” is widely held in society, in many cultures and is reinforced by many of the materials of a standard SEL, in which anger is discussed as something to be rid of and “managed” (Morningside Center for Teaching Responsibility, 2015, p. 18). The psycho-educational lesson that followed the question, aimed to clarify the difference between the experience of feeling mad, both emotionally and physically, and the actions of being mad, such as physical or verbal aggression (Fosco, DeBoard, & Grych, 2007). From there, more distinctions were made between negative actions and the alternative healthy choices one can make to express anger. The trauma-informed piece led to a further distinction, between anger from a common life experience, and anger igniting the flight-or-fight mechanism, and explaining that anger can have a life-saving purpose that gives energy to parts of the body that might need it for safety. Using animals again with the example of the saber-toothed tiger, not only de-pathologizes the experience, also illustrates how natural the fight or flight mechanism is in the animal kingdom. Before and after the intervention the facilitator
asked the question, “Is it OK to be mad?” and the children verbalized the shift by explaining the distinctions between appropriate and acceptable feelings with appropriate and inappropriate actions.

Following the story-telling and acting out, the facilitator led a discussion to process the experience. With new awareness, time was spent naming and acknowledging emotions as they are felt in the body. In one story two princesses were chased by a group of angry cheetahs. The facilitator asked the children in the ‘audience’ to share what they experienced and what they noticed in their own body as they watched the story.

**Student:** When I watched K get chased, I was laughing but I felt scared too, like I was being chased.

**Researcher:** And do you remember what it felt like in your body to be scared?

**Student:** (laughing, with hand on chest) Yeah – it was like my heart was pounding and we were all kinda jumping out of our seats, like ‘run, run’.

Another example was shared by an ‘actor’, following the story about finding a safe place.

**Student:** Me and J and O, we all were so cozy when we found the cave. Felt like we were playing house and stuff.

Through the structure of the story and natural play, the children had experiences of connection, self- and mutual regulation following moments of fear, anger and excitement inspired by their jointly created adventures. The processing allowed them to link what was taught, with what they were feeling emotionally and somatically.
Future Study

There is a dearth of research on short-term trauma-informed universal interventions in school settings, and close to none on body-oriented approaches, which underscores the need for more research (Burbridge, 2014; Dorado et al., 2016; Gelkopf & Berger, 2009; Langmuir et al., 2012a). “The development and examination of somatically oriented interventions for trauma survivors has not kept up with the growing awareness of the impact of trauma on the body” (Langmuir et al., 2012b; van der Kolk & Fisler, 1994, p. 215). More research will help shed light on ways the helping community can collaborate in addressing the impacts of trauma as a public health issue. The classroom based trauma-informed studies showed positive results but their comparison was to an absence of an intervention (Gelkopf & Berger, 2009; Khamis et al., 2004). In this study, having a control group take part in lessons from an SEL created a comparison which then raised the bar for achieving significant differences between the conditions.

Future research on The Body’s Story can build on what was gained in this study with a design aimed at mitigating some of the factors that may have interfered with finding significant evidence. There were certain features of the intervention itself that could be tweaked to maximize benefit for an improved rollout in a future study in a similar setting. The mode of delivery is the focus of critical examination and clearly needs to be adjusted for future study. A system utilizing technology in delivery of the measures and organizing the structure of the intervention itself would be recommended. As discussed, the number of measures needs to be kept to a minimum, but using an iPad could make the process less burdensome and more productive.

The intervention requires very little in the name of tools or props, which is an asset.
However, keeping track of which children had turns from week-to-week was imperfect as it worked to create balance for that session, but since started over each session, some children expressed feeling a lack of fairness (“she always gets to be in the story part”). The upshot is that their complaints revealed a desire to be involved in the stories. Though they were given the option to pass or watch, not a single child took that option at any time. (Notably in the control group, a few children chose not to participate in certain role-play activities). Integrating technology to better track which roles a child had from week to week would improve the fairness factor and be helpful for data collection.

The question of how trauma-informed a system needs to be to support effective programming and increase resilience is an important and complicated one. One option is to test the effectiveness of this short-term intervention and eliminate some of the complicated variables that may have interfered with the outcome may be to bring it to a school that has already proven a commitment to a comprehensive floor to ceiling trauma-informed approach. In this way, a 6-week program would be adding the classroom piece and not be undermined by competing values and still be teaching self-regulation and encouraging class-connectedness, which are not typically included in the overall trauma-informed approaches. Another avenue would be to study the technique in a mental health agency such as a domestic violence agency, or a clinic that offers group therapy for children. This may eliminate some of the moving variables that exist in a school, as the agenda is more aligned with the purpose of the intervention. Another advantage of a mental health setting is that it offers the opportunity to test trauma directly, because unlike at a school, it is an appropriate setting in which to do so. Outside agencies pose their own obstacles, mainly that, as noted for justification in the school system, children and families that need services most, often have struggles that keep them from consistent
participation in such programs. A residential treatment facility has the benefit of offering a school setting and availability of subjects who are housed within a mental health framework. However, unless it has incorporated a trauma-informed culture, some of the same issues may arise around institutional norms conflicting with the premise of the experimental intervention.

A concern with suggesting the above, that this study was intentional about not doing, is implying that short-term interventions can only be successful in facilities that already have resources in a trauma informed foundation, or to children already engaged in mental health services. One driving goal of this study was to offer something rich with experience and information that could be implemented in areas without much resource. There would be value in testing in such a way to rule out other variables, and if it could prove effective there, the ultimate goal would be to bring it to settings that may not be as far along in the trauma-sensitive process.

The HEARTS program began at the district level and made the criteria for implementation “principal buy in and good-enough infrastructure” (Dorado et al., 2016, p. 164). When it comes to trauma-informed, what is ‘good enough?’ This would be an important question for research to tease out for ethical and practical reasons. It would be essential to support the school systems that need this approach most, and those often have the least amount of resources due to high co-occurrence of race, poverty and trauma. The conundrum is that there is a well-established co-occurrence of under-resourced institutions with a prevalence of traumatized children. Further, those very schools in the climate of school reform have an increased pressure to produce academic results to stay open (Ravitch, 2016). It becomes cyclical when academic results are tied heavily to rates of unaddressed trauma. It is both a tough sell and an essential one.
An element that was left unexplored in the initial steps of the study was a deeper examination of racism and the school-to-prison pipeline. Exposure to racism is another form of emotional violence, one that is chronic and silenced. And just like other forms of trauma, racism negatively impacts motivation, the ability to focus and feelings of safety (Stevenson, 2014). The connections between explicit and implicit bias and trauma are inescapable, so the response needs to be explored in order to make programming, and the studies looking at the programming, more effective and grounded in a larger context. There is a cultural dimension to this 'pull up by the bootstrap’ philosophy that can reinforce a victim-blaming mentality. It is not uncommon in American culture for the victim to be blamed directly or indirectly, so that institutions and those in power can avoid dealing with the complexity of trauma, poverty and racism (Catherwood, 2015). Strategies of “silence, social dissociation, and separation from responsibility” (Case & Hemmings, 2005, p. 606) are commonly utilized, which are painful and potentially re-traumatizing for students, primarily students of color (Stevenson, 2008). Three elements of trauma informed care emphasize the action acknowledging: realize the prevalence, recognize how trauma affects individuals and respond by putting this knowledge into practice (Wisconsin Department of Health Services, 2017). The blame for racism cannot rest on those most impacted, but rather relies on those in power to acknowledge and lead a systemic shift, likewise, those in power in educational institutions share responsibility for creating and protecting safety measures for the vulnerable. “Educators and administrators tend to overestimate the power of the person and underestimate the power of the situation” (Sultan, 2015, p. 3) and must take responsibility for providing what the child needs in order to succeed.
Conclusion

_The Body’s Story_ was designed to be delivered to an elementary school class as a supplement to a standard year-long SEL curriculum, or used as a brief stand-alone, trauma-informed introduction to the topic of emotions and self-regulation when there is not an SEL in place at the school. The study ignited some important questions that will hopefully inspire future study as well as some clarification about what is possible. It became clear that a trauma-informed program cannot necessarily fill in the identified gaps in an SEL, as it is not simply that messages are missing and need to be filled, but rather the philosophy motivating SELs is in direct contradiction. The information gained from this study could help structure and inform further development and research on short-term trauma informed interventions in school settings to continue to add to our knowledge of effective resilience building techniques.

This trauma-informed movement, motivated by the gripping clarity of the ACEs research, has led many institutions to painstakingly realign their culture to reflect a strength-based, trauma-sensitive community where children exposed to violence can thrive. There is momentum happening earnestly and independently from WaWa, Washington to Madison, Wisconsin to Sydney, Australia. Trauma does not exist in a vacuum. It is complex and multi-layered and far-reaching in its impact and the response must be equally complex, nuanced, innovative and collaborative to be effective, motivated by caring adults that believe in and want to promote the resilience of children.
APPENDICES

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Dear Parent or Guardian:

I am a doctoral student in the School of Social Policy and Practice at the University of Pennsylvania, a licensed clinical social worker, as well as a New York City public school parent. I am writing to request permission for your child to participate in a research study as part of my doctoral dissertation. The understanding is that New Yorkers are living in a stressful environment and that all children can benefit from building protection to deal with that stress.

I am studying two Social Emotional Learning (SEL) programs to see if either or both of the interventions will help children focus, feel calmer, more connected to their peers in the classroom and overall more resilient. The standard SEL has been studied before and is often used by teachers throughout the country, the other is a storytelling-based program that combines exercises and activities that have been well studied but have not been put together in a school setting before.

The hope is to use what is learned from the study to offer more programs in schools that will support children emotionally, socially and academically.

The study consists of the following:

1. A six-week storytelling-based Social Emotional Learning supplement or six weeks of standard Social Emotional Learning program, that will be offered as part of the current Character Building class that the guidance counselor runs with all third graders once a week (Mondays or Wednesdays depending on which class the child is in). The guidance counselor will be present for all the sessions that I facilitate, per NYC Department of Education rules.
2. Participating in this study is voluntary. Giving permission for your child to participate in this study involves having your child take a short survey before the SEL programs begin and after the programs complete (on the last day of the program and at a follow-up six weeks later).
3. Children whose parents choose not to have their child be part of study, will still participate in the storytelling-based Social Emotional Learning program or standard SEL as part of the Character Building class and simply will not take the surveys.
4. The survey will be given out during the same class period and will take 10-15 minutes to complete. The school guidance counselor will also fill out surveys about her observations before and after the program regarding your child.
5. The surveys will be explained in terms that your child can understand, and your child will participate in the study only if he or she has parental consent and he or she is willing to do the surveys.

6. All parents and all children have a choice whether or not to participate in this study, which requires completing the survey. It will have no impact on how your child or your family is regarded by the school and your child will face no negative consequences.

7. All of the information collected will only be used for the study and will have no effect on your child’s record or grades. All of the information will be confidential. Each child’s name will be replaced by a number on the surveys so even I will not know how your child responded to the questions on the survey. At the conclusion of the study, a summary of group results will be made available to all interested parents.

8. You and your child are not waiving any legal claims or rights because of your child’s participation in this research study.

9. As a show of appreciation, all participants in the study will be entered to win one of two $25 gift cards to Barnes and Noble. At the completion of the study, a drawing will be held. There will be two winning families - one from each class.

Should you have any questions or desire further information, please feel free to contact me:

Sara Kotzin, LCSW
School of Social Policy & Practice
University of Pennsylvania
646-483-8704
sarako@sp2.upenn.edu

Keep this letter after completing and returning the signature page to me.

If you have any questions about your rights as a research subject, you may contact the University of Pennsylvania Review Board (IRB) by mail at: IRB Office; 3624 Market Street, Suite 301 South; Philadelphia, PA 19104; by phone at: (215) 573 - 2540, or by e-mail irb@pobox.upenn.edu.

Sincerely,

Sara Kotzin
Dear Dr. Solomon:

The above referenced protocol and was reviewed and approved using the expedited procedure set forth in 45 CFR 46.110, category 7, on 08-Feb-2016. This study will be due for continuing review on or before 07-Feb-2017.

Approval by the IRB does not necessarily constitute authorization to initiate the conduct of a human subject research study. Principal investigators are responsible for assuring final approval from other applicable school, department, center or institute review committee(s) or boards has been obtained. If any of these committees require changes to the IRB-approved protocol and informed consent/assent document(s), the changes must be submitted to and approved by the IRB prior to beginning the research study.

If this protocol involves cancer research with human subjects, biospecimens, or data, you may not begin the research until you have obtained approval or proof of exemption from the Cancer Center’s Clinical Trials Review and Monitoring Committee.

The following documents were included in this review:
- HS ERA Initial Application, confirmation code: cabbhitia, submitted 1/25/16
- Parental Consent Form, version date 1/24/16
- Recruitment Letter for Parents, version date 1/24/16
- Assent Form, uploaded 1/25/16
- CITI Training Report of Completion for Sara Kotzin, passed 1/11/16
- Strengths and Difficulties Questionnaire (Adult), uploaded 1/11/16
- Strengths and Difficulties Questionnaire (Adult) Follow-up, uploaded 1/11/16
- Strengths and Difficulties Questionnaire (Student), uploaded 1/11/16
- Strengths and Difficulties Questionnaire (Student) Follow-up, uploaded 1/11/16
- IRB Vulnerable Populations: Children Form, uploaded 1/11/16
- Cover Letter, uploaded 1/11/16
- Experimental Intervention Format, uploaded 1/11/16

The IRB reviewed and approved the Subpart D review as per Federal Regulations 45 CFR 46.404 (FDA 50.51), as the research was determined to be no greater than minimal risk. The IRB determined that permission of one parent is sufficient and that adequate provisions are made for soliciting permission. The IRB has determined that assent must be obtained from subjects and appropriately documented.

When enrolling subjects at a site covered by the University of Pennsylvania’s IRB, a copy of the IRB approved informed consent form with the IRB approved from/to stamp must be used unless a waiver of written documentation of consent has been granted.
If you have any questions about the information in this letter, please contact the IRB administrative staff. Contact information is available at our website: http://www.upenn.edu/IRB/directory.

Thank you for your cooperation.

Sincerely,

Renee Crews

IRB Administrator
1. My name is Sara Kotzin

2. We are asking you to take part in a research study because we are trying to learn more about how to help children focus, feel calmer and more connected to their classmates.

3. If you agree to be in this study you will answer some questions about how you feel and what you think before and after we do some activities in your Character Building class.

4. Sometimes talking about feelings can feel new and different.

5. There are no benefits to being the study, but we hope to learn more from you and your classmates. This may help make better programs that help kids like you.

6. Please talk this over with your parents before you decide whether or not to participate. We will also ask your parents to give their permission for you to take part in this study. But even if your parents say “yes” you can still decide not to be in this study.

7. If you don’t want to be in this study, you do not have to participate. Remember, being in this study is up to you and no one will be upset if you don’t want to participate or even if you change your mind later and want to stop.

8. You can ask any questions that you have about this study. If you have a question later that you didn’t think of, you can call me (646) 483-8704 or ask me the next time you see me.

9. Signing your name below means that you agree to be in this study. You and your parents will be given a copy of this form after you sign it.

________________________________________  __________________
Participant                                  Date

________________________________________  __________________
Investigator                                Date

APPENDIX D - I
The Body Drawing:
Children were invited to check in and see how their body felt, emotionally and physically and then color in how they were feeling in their body using colors of choice to represent those sensations.
How are you feeling?

Happy    Joyful    Content    Silly

Sad    Angry    Scared    Worried

Confused    Surprised    Hurt    Embarrassed

Sensations List:

Warm
Shaky
Stiff
Tense
“butterflies”
Jittery
Twitchy
Sharp
Tight

Tense
Foggy
Hungry
Numb
Cold
Thick
Jumpy
Sluggish
Blurry

Appendix Diii


Downey, L. (2012). *Calmer classrooms: A guide to working with traumatised children*


Green, E. (2016). *Unconditional education program shows promising results*. The Chronicle for Social Change,


doi:10.1177/0886260510383026 [doi]


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