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Cultivating Compassion in Primary School Youth: A Qualitative Analysis

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An abstract of
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Abstract

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By Mackenzie Collins

Introduction: Compassion is cultivating not just the feelings of empathy, but the actions motivated by the ability to understand the feelings of others. Compassion cultivation is associated with positive health outcomes, but most studies have only focused on adult populations. There has been a shift to focus on K-12 schools as it is a crucial developmental stage that offers larger intervention reach. Compassion cultivation programs specifically targeting adolescents can help to establish a set of tools to combat struggles in emotional and behavioral health and be instrumental to the overall health and well-being of individuals. With this knowledge, a collaborative endeavor between *Children in Crossfire* and The Center for Contemplative Science and Compassion-Based Ethics was implemented to produce an eightweek intervention where students learned lessons of cultivating compassion and developmental education training.

Objective: This study investigates how training primary school youth in cultivating compassion can influence how their personal understandings of compassion evolve. The study looks to see how compassion training can influence students and note the subtle changes they may be experiencing when thinking about compassion in regards to themselves, others, and the idea of sharing common humanity.

Methods: The primary researcher used qualitative methods to conduct a secondary data analysis on the baseline, midpoint, and end line worksheet questionnaires. The researcher utilized techniques to examine the questionnaire data using three main phases: 1) code and codebook development, 2) the application of codes, and 3) thematic data analysis.

Results: The students showed subtle shifts in language that highlight the idea that lessons of compassion had started to be understood. The results show that children at this age can benefit from learning and understanding compassion for themselves, others, and people around the world.

Conclusion: The findings in this study are consistent with prior studies suggesting that while compassion cultivation is important, there need to be better measures to effectively measure the changes and how that affects overall health and well-being. This study can contribute to the development and eventual validation of measures that can be used to assess what impact compassion training has on young children.

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Definitions of Common Terms

Compassion: Noticing the suffering of another coupled with the wish to alleviate it

Self-Compassion: The positive and caring attitude towards oneself when confronted with failure or shortcoming

Common Humanity: Recognizing that the human condition is imperfect and that we are not alone in our suffering

Resilience: The ability of an individual to withstand and rebound from adversity and also communicate our vulnerability

Empathy: The ability to notice the subtle verbal and non-verbal signals people give off that let you know what they need or want.

Sympathy: The feelings of concern for others who are in distress

Interdependence: The concept that things and events do not arise without a context, but instead, depend on an array of other things and events for their existence

Mindfulness: Involves holding and accepting one's present-moment experience as opposed to getting involved with the emotion

Well-being: The state that stems from learned techniques (i.e. stress management, resilience) that can generate and promote emotions that lead to good feelings in one's own and other's best interest

Background and Review of the Literature

Compassion In Public Health Literature

Compassion is a field that has been growing in interest and attention, despite not previously being widely researched especially in the public health arena. Stemming from conversations surrounding empathy and mindfulness practices, compassion has become a new trend in the conversations of developmental practices that may be essential for individual health and well-being.

What is Compassion?

In order to deepen our understanding of compassion, we must first explore the different aspects that makeup compassion. The different types of compassion this paper will focus on include self-compassion, compassion for others, and the idea of common humanity.

Self-Compassion

Self-compassion can be described as a positive and caring attitude towards oneself when confronted with failure or shortcoming (Neff, 2003a). Researchers have proposed that self-compassion, which emphasizes forgiveness and kindness towards the self, buffers individuals against guilt, shame, and rumination after the perceived mistakes in behaviors, which frees up cognitive and emotional resources for self-regulation (Horan, 2018). Self-compassion is also defined as "the process of being open to one's personal failures, inadequacies, and suffering and responding to them with common humanity, mindfulness, and self-kindness" (Neff, 2003a). Kristin Neff's self-compassion has three elements (Neff, 2017). They include (1) self-kindness

vs self-judgment, (2) common humanity vs isolation, and (3) mindfulness vs over-identification (Neff, 2017).

Showing self-kindness is the process of accepting one's own limitations and recognizing that they are inherent to the human condition. This is in opposition to self-judgment where one meets their limits with frustration or stress (Neff, 2017). Self-kindness and mindfulness are two practices that are fundamental to achieving a high sense of self-compassion. Self-kindness is the ability to treat oneself with care and understanding, rather than with harsh self-judgment (Neff, 2003b). It can denote treating oneself with understanding and tenderness while suffering.

Common humanity is the understanding of suffering is a universal experience and no one suffers alone in that struggle (Neff, 2017). The awareness of common humanity is the idea of realizing that imperfection is a shared aspect of the human experience, rather than feeling isolated by one's own failures. Neff describes the awareness of the common threads of humanity as the ability to perceive one's own failures or painful experiences as part of the larger picture of the human experience. This is instead of seeing those experiences as separate or isolated from others (Neff, 2010). Common humanity encourages the ability to harbor one's feelings of suffering combined with a sense of connection, warmth, and concern (Neff, 2010). The recognition of common humanity within self-compassion also allows individuals to be less judgemental and more willing to understand one's own inadequacies. Understanding common humanity through the learning of self-compassion can enhance the ability to be aware of and compassionate toward the negative experiences one has in life. Through this, individuals allow themselves to process negative emotions and experiences in a more efficient way to not infringe upon positive feeling states such as optimism or happiness (Neff, 2009).

Mindfulness is the act of recognizing and expressing one's emotional state that does not lean towards suppression nor exaggeration, but instead towards a neutral means of communication (Neff, 2017). It is holding one's present-moment experience in a balanced perspective with others rather than dramatizing the storyline of one's own suffering (Neff, 2003b). This can be done by not over-identifying oneself with painful thoughts or emotions. Self-compassion begins to represent a balanced integration between concern with oneself and concern for others, a state that researchers are increasingly recognizing as essential to optimal psychological functioning and in those positive health outcomes (Neff, 2010; Blatt, 1995).

Some researchers say that self-compassion can also result in a shift in cognitive-emotional mindset. This shift accounts for facing negative emotions and experiences with more self-kindness, mindfulness, and an awareness of common humanity (Neff, 2015). Neff explains part of this cognitive-emotional mindset shift in which the learning and internalization of self-compassion do not replace negative feelings with positive feelings, but instead teaches individuals to cognitively accept their negative emotions and experiences and integrate them into the other feelings (Neff, 2015). Because of these shifts, self-compassion becomes a healthy way of relating to oneself which can heighten positive mental health and reduce poor mental health (Gilbert & Procter, 2006; Neff, 2003a). Research suggests that self-compassion is strongly related to psychological well-being, including increased happiness, optimism, personal initiative, and connectedness, as well as decreased anxiety, depression, neurotic perfectionism, and rumination (Neff, 2003a).

Compassion for Others

Compassion for others is an emotion that arises from witnessing other's suffering and brings about a feeling or motivation of wanting to help. This literature often comes from studies of compassion among clinicians and educators. In nursing praxis, compassion has been shown to be an important aspect of building interpersonal relations with patients (Fry, 2013). Compassion caring has become a critical piece to understanding how emotions, proper communication, and interpersonal relationships can be optimized to achieve a higher level of a culture of care established in all clinical settings (Fry, 2013). Compassion for others usually exists in a contextrelated emotional display that is triggered by a cause (Goetz et al., 2010). The term compassion has gone through many iterations that include and stem from emotions of empathy, sympathy, caring, and understanding (Goetz et al., 2010; Roeser, 2018). Emotions of distress, tolerance, empathy, and kindness have all been attributable to common definitions of compassion (Beaumont, 2016). It has been seen as the motivational need for all living things on the Earth to be free from suffering and Gilbert states that this intense desire is what compassion is rooted in and is the defining factor of how one can begin to engage with suffering (Gilbert, 2017). Compassion has been linked to empathy and perspective taking, which are essential to the ability to detect pain and suffering in others (Roeser, 2018).

In 2016, Strauss consolidated different key definitions of compassion and came up with a list of what is identified as the five key elements defining compassion. These elements include: "(1) recognizing suffering, (2) understanding the universality of human suffering, (3) feeling for the person suffering, (4) tolerating uncomfortable feelings associated with the empathic understanding of another's suffering (e.g., fear, distress), and (5) the arousal of motivation to act to alleviate the suffering" (Strauss, 2016; Roeser, 2018). These elements capture what

compassion means and aides in the conversation on how to better understand measuring compassion in different fields of research.

Common Humanity

Common humanity is made up of two different components being appreciating the fundamental equality of all and appreciating how systems affect well-being (Center for Contemplative Science and Compassion-Based Ethics, 2017). The first component is getting students to recognize that equality extends beyond their immediate community and to the world. This is the realization that we all share commonalities as human beings and deserve to experience in emotions and aspirations like happiness and overall well-being, in addition to the avoidance of suffering (Center for Contemplative Science and Compassion-Based Ethics, 2017). Social intelligence and common humanity cultivation in youth populations help to recognize that all individuals should be treated with care and kindness. It also posits that one must have self-compassion and awareness of common humanity to avoid separating oneself from others (Neff, 2010).

The second component is recognizing how systems in place can promote or inhibit the well-being of individuals of structural, cultural, or institutional levels. These systems can promote positive values or perpetuate problematic beliefs and inequalities (Center for Contemplative Science and Compassion-Based Ethics, 2017). It is a way to recognize that so many of the feelings, actions, and experiences that individuals face are largely due to factors that remain outside of their personal control (Neff, 2003b). These factors can include environmental conditions, family history, culture, genetics, and also the demands or expectations of others (Neff, 2003b). The ability to be able to connect one's own experiences to things out of their

control or to themes of greater humanity means that the cultivation of the awareness of common humanity has been reached (Neff, 2003b).

Compassion May Be Essential for Individual Health and Well-Being

Compassion may be essential for individual health and well-being as this is still an emerging field of inquiry. Dr. Thupten Jinpa describes compassion as what links the feelings of empathy with the altruistic acts of kindness and generosity (Jinpa, 2017). Expanding on this definition, Dr. Jinpa defined compassion as being comprised of four major components: cognitive, affective, intentional, and motivational. The cognitive component is having an awareness of suffering. The affective component is a sympathetic concern that is related to being emotionally moved by suffering. The intentional component centers around the wish to see the relief of that suffering, followed by the motivational component where there is a responsiveness or readiness to help to relieve that suffering (Jazaieri, 2013; Kirby, 2017). It is cultivating not just the feelings of empathy, but the actions motivated by the ability to understand the feelings of others (Center for Contemplative Science and Compassion-Based Ethics, 2017). This cultivation of compassion is associated with positive health outcomes.

The cultivation of compassion has been linked to various examples of stress response and reactivity. A study done by Pace *et al.* was conducted to look at the relationship between children in foster care, who experienced high rates of early life adversity (ELA) and their relationship with engaging in Cognitively-Based Compassion Training (CBCT) practices to see if that reduced their C-reactive protein (Pace *et al.*, 2013). They found that the cultivation of compassion can lead to reduced stress reactivity, as well as an improved amount of hopefulness, which is a trend for decreased anxiety (Pace *et al.*, 2013). CBCT and the cultivation of

compassion can be used as a "preventive, or disease-modifying, behavioral intervention in foster children, and by extension, to other populations of young people with experiences of ELA" (Pace *et al.*, 2013).

Compassion has also been shown to be linked with psychological well-being. Standing on the benefits of mindfulness and social and emotional learning, the cultivation of compassion has been a new conceptualization entering the discourse that is linked to well-being. Well-being is defined as the state that stems from learned techniques (i.e. stress management, resilience) that can generate and promote emotions that lead to good feelings in one's own and other's best interest (Davis, 2019; Center for Contemplative Science and Compassion Based Ethics, 2017). Studies have shown that a compassionate attitude towards oneself can help to buffer the effects of stressful situations on negative affect or psychopathological symptoms and to promote wellbeing. In a study, Xavier et al. found that people with high shame and high amounts of selfcriticism often reported having negative beliefs about compassion. This same adolescent population showed having fears, resistance, and avoiding compassionate feelings and behaviors towards themselves can also lead to expressing physical acts of violence towards oneself (Xavier et al., 2016). Xavier defines this fear of compassion being the "resistance and tendency to avoid experiencing compassionate feelings as well as behaving in a compassionate way towards others and oneself" (Xavier et al., 2016). This avoidance or fear of compassion for others and for self was associated with depression, anxiety, stress, self-criticism, and facing difficulties with senses of safety and self-reassuring feelings (Xavier et al., 2016). They conclude that compassion training, especially in adolescent populations, can have a key role to helping manage the intense range of negative emotions and cognitive responses (i.e. shame, hatred, self-criticism) (Xavier et al., 2016). Another study was done by Muris et al. has shown that self-compassion has protective properties in regards to resilience to and recovery from traumatic events and stress in nonclinical adolescent youth ages 12-17 (Muris *et al.*, 2016). When individuals showed high levels
of self-compassion they tended to display lower levels of post-traumatic stress symptoms, as well
as symptoms of panic, depression, and suicidality (Muris *et al.*, 2016). Other studies have
solidified the idea that self-compassion and displaying compassion for others can lead to positive
psychological well-being. Krieger found that the lack of self-compassion predicts depressive
symptoms and in turn, individuals who show higher levels of self-compassion tend to be more
aware of their personal needs, which can help to prevent depressive and other psychological
symptoms (Krieger, 2016). Another study was done by Lopez *et al.* to explore the mean levels of
compassion for others and self-compassion in the general population, their interrelationship, and
their association to psychological well-being and demographic factors (Lopez *et al.*, 2018). The
results showed that self-compassion was associated with lower levels of depressive symptoms as
well as negative affect (Lopez *et al.*, 2018).

The evidence presented suggests that compassion is important for individual health and well-being. While much of the literature and previous studies focus on adults or children in clinical settings, much less is known about how to cultivate compassion for the purpose of improving outcome measures of well-being over the course of childhood and adolescent development. We need to better understand what is going on in children, especially in educational spaces.

Focusing on K-12 Students

Social and Emotional Learning (SEL) is a way of teaching and learning that integrates knowledge, attitudes, and skills in order to understand one's emotions, manage those emotions,

set goals, show empathy, cultivate positive relationships, and be responsible decision-makers (CASEL, 2019). SEL aims to teach students their main tenets including self-awareness, self-management, emotion regulation, social awareness, relationships skills, and responsible decision-making (CASEL, 2019). Emotion regulation refers to the process in which individuals are able to pay attention to their emotions, while managing the intensity and duration of said emotions, and changing the meaning of that feeling state when confronted with painful or stressful experiences and situations (Neff, 2010; Thompson, 1994). Self-compassion is a way to modify and accept negative emotions and garner more positive emotions and in that has emotion regulation at its core (Berking & Whitley, 2014; Neff, Kirkpatrick, & Rude, 2007). When individuals poorly regulate their emotions, it can lead to empathic distress when confronted with another individual who is suffering. This can lead to acting in self-focused ways rather than other-focused actions (Batson, 2011; Eisenberg *et al.*, 2006).

The cultivation of these skills can lead to different behavioral outcomes by enabling them to understand their feelings and response to feelings of stress through positive self-regulation practices (CASEL, 2019). These self-regulatory actions promote more positive patterns of internal stress regulation and, externally, promotes engaging in behaviors that have more positive health outcomes (Horan, 2018). Honing in on these skills helps students to decrease their impulsive emotional behaviors by being able to disengage from the automatic response and control it by understanding their feelings. This, in turn, can lead to consciously engaging in behaviors that can promote positive health outcomes (Horan, 2018).

In kindergarten to 12th grade (K-12) students, there is evidence that programs can improve social and emotional skills that support increased health and well-being outcomes. The types of SEL training included mindfulness practices, empathy cultivation, practices in

emotional self-regulation, the cultivation of social, and emotional intelligence, and numerous other social and emotional development modalities (CASEL, 2019). A number of studies suggest that explicit training in these various practices supports the cultivation of these social and emotional skills (CASEL, 2019). Studies show that the relationships between mindfulness practices and their observed increase in student's ability to be more attentive to their experiences and emotions are something that has been theorized through many research studies (CASEL, 2019). Students engaged in mindfulness training students have more willingness to feel both positive and negative emotions and accept them as part of life (Forman & Butryn, 2015). Social and Emotional Learning interventions and programs have been shown to promote healthy living and have positive health benefits that include increased cognitive control, reduced depression, and overall improved well-being (Schonert-Reichl et al., 2015). SEL programs have been developed for K-12 students because this is an age where it is an important time for the social and emotional development of these skills. Multiple studies have concluded that the integration of SEL into education has led to a multitude of benefits for the students while in school and throughout adulthood (CASEL, 2019). There have been studies that have been shown to examine the use of SEL in classrooms has elevated students mental and emotional health, social skills, academic achievement, and the lifelong benefits it has shown (CASEL, 2019). Other studies have been done to show the effects that SEL training has supported students beyond social and emotional development and can show well-being markers associated with longer-term health outcomes (CASEL, 2019).

Compassion cultivation falls within the broader field of social and emotional learning, but much less is known about the benefits of compassion training on long-term developmental outcomes. Compassion training differs from SEL in that it includes the cultivation of social and

emotional intelligence through the lens of compassion for self and others. Compassion training also integrates an understanding of systems-level thinking that can support an embodied understanding of common humanity and how to take actions that support the cultivations of socially just systems (Center for Contemplative Science and Compassion-Based Ethics, 2017). We are just beginning to understand the impact this type of training can have on young children and adolescence. There is a need for a greater understanding of the influence of compassion training on the cultivation of skills that support longer-term outcomes of well-being.

Cultivating Compassion in Educational Programs

Although the evidence and research of cultivating compassion in young children are still somewhat scarce, the interest in compassion cultivation-focused programs for students and young adolescents are increasingly being brought into the larger field of educational programs and public health discourse. There has been a push to bring mindfulness, social-emotional learning, and now compassion into educational spaces to help promote positive health and well-being among individuals. Like mindfulness practices, compassion training in childhood developmental phases has been noted to promote positive changes in perspective-taking. There are different avenues that are being used to help shape the development of compassion in children and students and these are now being seen as the focus of a few educational programs and interventions.

There is a small number of educational programs that have specifically been working to incorporate compassion training into their interventions. In 2017, James Kirby compiled, synthesized, and compared the different programs that focus on the cultivation of compassion. Kirby noted that there are currently six empirically supported interventions in this topic area that

includes Compassion-Focused Therapy (Gilbert, 2014), Mindful Self-Compassion (Neff & Germer, 2013), the Compassion Cultivation Training (Jazaieri *et al.*, 2013), Cognitively-Based Compassion Training (Pace *et al.*, 2009), Cultivating Emotional Balance (Kemeny *et al.*, 2012), and Compassion and Loving-Kindness Meditation (Hoffmann, Grossman, & Hinton, 2011; Kirby, 2017). All of these interventions have been proven effective for the population that they are working with by randomized control trials or systematic reviews and there are two additional compassion-focused interventions that exist but have not gone through this process. After completing this meta-analysis, Kirby concluded that compassion-based interventions can help to improve life satisfaction, improve physiological health, mental health, emotion regulation, and interpersonal and social relationships (Kirby, 2017).

To date, most of these interventions focus on clinical settings or older populations with specific health needs, but there are only a few that focus more so on youth populations.

Cognitively-Based Compassion Training was adapted to fit adolescents in foster care, where they found that children were able to start to employ these compassion practices to help control angry feelings as well as stress (Reddy, 2013). Zeller *et al.* did a study where they hypothesized that the more an individual can employ compassion and self-compassion practices when dealing with stressful events, the more likely they are to recognize the need for self-care, the need to process their negative emotions and not avoid them, not blame themselves for their situation, and memorialize the event as an experience and not a defining part of their lives (Zeller *et al.*, 2015). They concluded that the higher levels of self-compassion were protective of trauma-related psychopathology symptom outcomes, PTSD and panic, and reduced levels of suicidality (Zeller *et al.*, 2015). Muris, as well as Bluth, did a study to seek if compassion cultivation is protective against mental health or stress, respectively. Muris found that there needs to be a better way to

measure the protective qualities of cultivating self-compassion and urges researchers to find ways to correct this in the future (Muris, 2016). Bluth finds that those who had higher levels of self-compassion self-reported that they experienced less anxiety, stress, and negative affect (Bluth, 2016). Those same individuals who had higher self-compassion also self-reported that they experienced greater life satisfaction as well as positive affect (Bluth, 2016). Bluth also notes that finding ways to incorporate and strengthen compassion in adolescents can result in less psychological and cognitive struggles over an individual's lifetime (Bluth, 2016).

These studies can show that compassion cultivation can have a positive and protective effect for a younger at-risk age group. Programs specifically targeting adolescent age groups during this crucial developmental stage can help to establish a set of tools to combat struggles in emotional and behavioral health outcomes and be instrumental to the overall health and well-being of individuals over a lifelong trajectory. But overall, still much less is known about compassion cultivation during childhood and adolescence. In that, we do not know much about how these programs might be influencing a child's actual understanding of compassion. We also do not know if this understanding might influence compassionate behaviors.

Conclusion

This development of social intelligence and the cultivation of compassion in childhood can be associated with more positive adult outcomes in health and well-being (Ashar *et al.*, 2016). We see evidence that compassion cultivation is essential for health and well-being, and that childhood is an important time to cultivate compassion. But we do not know much about how compassion is learned, or how compassion training might be influencing a child's knowledge of compassion. We also do not know if these influences actually lead to increases in

compassionate engagements in a real-world context. These are both critical elements to understand if we are to use compassion training to improve health outcomes.

Introduction

Compassion skills can have a positive influence on coping and development in early life (Dvořáková, 2019). As shown in previous studies, the cultivation of compassion has been shown to have positive and protective effects on emotion regulation, stress reactivity, and coping of negative emotions in early life (Kirby, 2017). But still, few practices have focused on contemplative practices other than mindfulness. This study strives to focus on compassion specifically and to examine these benefits in the education system. Because the effects of compassion cultivation have not been studied as frequently in adolescent populations, there is a gap of understanding these connections in youth and student populations. This study seeks to expand upon what we already know about the positive effects of compassion and understand the influence of is cultivation in youth populations.

As described above, the majority of research on contemplative practices has focused on adult populations. In contrast, significantly less attention has been devoted to children or the application that cognitively-based practices might have in non-clinical populations, such as in educational settings. We know that K-12 is a crucial time in life for the development of compassion skills. At this age group, children have the ability to start to understand how feelings, emotions, experiences, and interpersonal relationships are all interconnected (Forman & Butryn, 2015; CASEL, 2019). These compassion cultivation initiatives can be in schools, community programs, and faith-based organizations. Yet to date, there are not many studies focusing on this age group. Compassion training can support in being mindfully aware of one's own emotions,

and in turn developing social intelligence, and emotion regulation (Reddy *et al.*, 2013). What we need is a reliable and effective way to measure these shifts in understanding of compassion and what that means for prolonged shifts in behavior.

Few studies have examined the broader beneficial health effects that programs employing compassion cultivation can have on factors such as improvements in prosocial behavior, reductions in stereotype and bias, changes in self-concept and self-esteem, and improvements in factors related to positive mental health and flourishing (Keyes, 2007). The purpose of this study is to address some of what we do not know about the influence of compassion cultivation skills in youth. The study was designed to examine, in educational settings, how compassion is learned and if these influences could aid in leading to prosocial skills and behaviors in real-world settings. It is to examine the factors which contribute to training children in compassion and how that can influence changes in perspective-taking. The purpose of this study is not to consider a specific health outcome, but to understand if the cultivation of compassion training can influence or may be essential to individual health and well-being. Situating this conversation of training children in compassion into the public health discourse is contributing to the strength of being able to recognize its use in future interventions and programs.

In order to describe how children learn and cultivate compassion, it is also important to understand what it means to actually measure compassion and the theories behind linking compassion to positive health outcomes. An overall objective of this study is to contribute to the eventual validation of what it means to assess and measure the impact of training children in compassion. The aims of the study that will contribute to the future research of compassion cultivation are as follows:

Aim 1: To describe how children learn compassion and how that shapes their perspectives

of the self and others

- Aim 2: To examine and measure compassion understanding in children
- Aim 3: To understand how compassion may be essential for individual health and well-being

Looking at the ways children originally viewed compassion and their initial expectations surrounding these topics compared to their midpoint and post-intervention views will help to illustrate how children are understanding compassion for themselves, others, and within the theme of common humanity. These changes in perspective will illustrate ways that can promote positive health outcomes. Overall, this study seeks to examine if and how students demonstrate different attributes, feelings, and emotions related to compassion. These include any sensitivity to others suffering, the Earth's suffering, self-compassion, common humanity, emotional distress, empathy, resilience, and interconnectedness.

Setting and Population

This study was a collaborative endeavor between *Children in Crossfire* and The Center for Contemplative Science and Compassion Based Ethics. *Children in Crossfire* is a nonprofit organization in Ireland that has extensive experience delivering development education training to educators. The organization has devised a course called *Teachers in Development and Learning* (TIDAL) which has been delivered to over 2,000 teachers in Ireland over the past eight years. TIDAL is a *Continuing Professional Development* (CPD) and an *Initial Teacher Education* (ITE) course that provides teachers with the knowledge, skills, and confidence to use participative methodologies and active learning to engage young people in global citizenship education (Children in Crossfire, 2017). *Children in Crossfire* developed an initiative within their development education called "Educating the Heart" in 2013. The initiative of "Educating the Heart" was inspired by the Dalai Lama who brought about notions encouraging the integration of love, respect, and compassion in the hearts and minds of students in different initiatives around the world (Children in Crossfire, 2017).

The Center for Contemplative Science and Compassion-Based Ethics (CCSCBE) at Emory University has created a training program for the cultivation of compassion (Center for Contemplative Science and Compassion-Based Ethics, 2017). The purpose of CCSCBE's compassion training is to cultivate a sense of concern that comes from the confrontation of another person's suffering for the purposes of seeing that suffering relieved (Center for Contemplative Science and Compassion-Based Ethics, 2017).

In collaboration with CCSCBE, *Children in the Crossfire* included this compassion training into the TIDAL teacher development program. This compassion training was developed

by the CCSCBE and is called *Cognitively-Based Compassion Training* (CBCT). The two programs then worked together to integrate compassion training into the development education training delivered by the teachers who went through the TIDAL training (Children in Crossfire, 2017). Development education is a framework that aims to cultivate the skills of global engagement by developing a sense of global citizenship and by connecting classrooms to global learning (Children in Crossfire, 2017).

The current intervention integrates compassion training into the development education program delivered by teachers who go through the TIDAL training. The purpose of this developmental approach is to work with students to cultivate skills to become active citizens and peace-builders throughout the world. *Children in Crossfire* works with teachers to train them in how to empower their students in the classroom. Their approach is made up of three prongs to work to empower students in different ways. This includes guiding students to "(1) become active citizens who have the capacity and courage to stand up for local and global justice; (2) develop knowledge, skills, and confidence to bring about change for a world that is more fair and peaceful; (3) to explore inner values and to reshape attitudes, perceptions, and behaviors in order to respond to local and global issues from a place of empathy and compassion both within themselves and for others" (Children in Crossfire, 2017). Development education is rooted in Freirian liberation theory, social change education, and critical pedagogy, promotes critical thinking to enable students to be able to better understand the interdependent, unequal, and unjust systems that are present in our current world (Children in Crossfire, 2017).

Study Ethics and Informed Consent

The research protocol was approved by The Institutional Review Board (IRB) at Life University in Marietta, Georgia. The recruitment of the teachers and students all occurred at the International Community School in Ireland. Teachers who volunteered for participation in the training were assigned to either CBCT or Mindfulness. Based on the teachers who volunteered, classrooms of children were selected. Written informed consent forms were disseminated which included information on the measures being assessed to both teachers and the classrooms which were obtained prior to the subject's participation in the intervention. The parents of the children (who were all under the age of 18), were given both the written and verbal consent in order for their children to participate. Parents had to option to not enroll their children as well as withdraw their child at any time without penalty. There was no known risk to the participants, as their participation was voluntary and the information collected from them was to be kept confidential. Confidentiality was maintained by de-identifying the data.

Research Methods and Sample

The facilitators who were involved in the intervention were trained in Cognitively-Based Compassion Training (CBCT) by Brendan Ozawa-de Silva. The students were broken up into two groups of 15-16 for an eight week period. The eight-week intervention training included four weeks of compassion training and four weeks of development education training. The different lessons of compassion training surrounded the topics of compassion, self-compassion, resilience, empathy, and interdependence. The students also received developmental education training and instruction.

There were two main elements of the eight-week program. The "Inside" portion was composed of compassion training and emotional literacy. The "Outside" portion was

developmental education issues through critical literacy. The first classroom of students started with the cultivation of self and other compassion over the first four weeks. For the latter half of the intervention, they started exploring interdependence and development education (Inside-Out Program). The second classroom of students started with the standard development education methods for the first four weeks and then moved on to the compassion-based methods for the remaining four weeks (Outside-In Program). The data for the study were collected from 31 primary and post-primary students across both groups, who filled out a total of 84 qualitative surveys at the pre, mid, and post time points.

Measures

Questionnaires were given to all students in both classrooms at baseline, midpoint, and at the end of the eight-week intervention. The students in Group A were given the Outside-In Approach. This means that they started with the standard development education methods and critical literacy and then applied the compassion-based training methods for the remaining half of the intervention. The students in Group B received the Inside-Out Approach. This means that they started with the cultivation of compassion training methods and then explored the standard development education and critical literacy in the latter half of the intervention. The qualitative survey guide is included as Appendix 1. The specific topics and intervention competencies were drawn from the literature and defined in the section above, titled Definitions of Common Terms, included:

- Compassion
- Resilience
- Self-compassion
- o Interdependence
- Empathy
- Development education issues

The developmental education program and intervention taught students critical thinking skills, emotional literacy, metacognition, a growth in mindset in attitudes and dispositions, as well as universal values (Children in Crossfire, 2017). These topics were used as a basis for guiding the worksheet/survey and is not inclusive of all topics discussed during the intervention process. The first few questions of each survey asked the students to fill in the blanks of what compassion for others is about and what it is not, as well as what compassion for yourself is and what it is not. On the pre-test, there was also a set of questions asking what compassion for the Earth is and is not. The pre and post-test guides then went into a section of questions on if they believe they live in a compassionate world. Starting with the dichotomous question "Do you think we live in a world that is compassionate?," followed by two fill in the blank questions: "I think this because "and "This makes me feel ." The students were asked to draw two pictures, one which was their personal depiction of what a compassionate world looked like, and one depiction of what a world without compassion looked like. They were then asked to pick which one they thought best represented our current world. The guide then prompted the students to think about if they thought people like them could make the world more compassionate, asking "Do you think young people like yourself can make the world Compassionate?" That question was then followed again by "I think this because _____," and "This makes me feel ____."

Data Management and Analysis

The analytical approach was a content analysis of the student responses for the purpose of identifying patterns of understanding, and changes in understanding across the training. Themes that arose from the three (pre, mid, post) test from the two classrooms were analyzed to provide insight on the subtle changes that young children have in their depth of understanding along with

the changes in how they feel about these concepts. Though the students had limited formal knowledge of compassion and no exposure to compassion training, they were able to provide examples of what they believe to be the most important aspects of compassion. This approach included both thematic assessment and quantification of change across the different groups.

The thematic analytical approach taken was both inductive and deductive. This was done to identify codes, their definitions, and the distinction between identifying them as deductive or inductive. Creating codes was a way to quantify and analyze common words, themes, and concepts across the responses. Inferences were then made about the messages read within the texts, taking into account the context of the intervention. The deductive approach was based on the SEE Learning framework of ethical intelligence. Ethical intelligence according to the SEE Learning Framework can be defined as "the ability to cooperate and collaborate with others, and the ability to deal constructively with conflict when it arises" (Center for Contemplative Science and Compassion-Based Ethics, 2017). We also took an inductive approach to understand what might be emerging from the data. They were then defined to better understand what they meant in order to be replicated by others. This provided a clear understanding and description of the concepts throughout the text. For the purposes of this analysis, the researcher was blinded to which classroom was which in order to look at the comparisons from the pre, mid, and post-tests. All of the worksheets were transcribed verbatim. The data were analyzed using MAXQDA 2018 software, which aided in the coding of the transcripts and the analysis of deductive and inductive themes. All of the worksheets were read and reviewed multiple times in order to develop the codebook which consisted of deductive, inductive, and theory-driven codes. These deductive and inductive codes can be referenced in Appendix 2.

Results

The different sections report the specific findings of the study, first related to the students in Group A (Outside-In), then to the students in Group B (Inside-Out), and then to the Global Changes seen across both groups combined. The mid-point evaluation will be highlighted throughout the deductive and inductive themes because it serves as an important indicator that shows what the children who received compassion training by midpoint are understanding in comparison to those who did not.

Compassion for Others

In this study, compassion for others can be described as noticing the suffering of another coupled with the wish to alleviate it. The researchers included this code when respondents referred to the different characteristics they felt specifically showed compassion for others. It was excluded when respondents spoke of compassion for self or for the Earth.

Group A

The students in Group A demonstrated a somewhat competent level in listing different adjectives and feelings and emotions when talking about what compassion for others is and is not. The adjectives for compassion for others mainly centered around being caring, loving, helpful, and kind to others. One example of a student explaining what compassion for others said:

Loving everyone and having diversity and treating everyone the same.

This makes us feel warm and fuzzy. (Mid11)

In the pre-test or at baseline, not showing compassion to others was mainly described by bullying, hating, or calling others names. It was also said to be shown by being rude, cheeky, mean, or by not caring for others. Not showing compassion for others then transformed into being expressed as not only bullying, being mean, or name-calling but added the element of doing those things about qualities that people can't change or for being different. A student stated:

Q: Compassion for others is not about

A: Bullying and disrespectful to others because they are different (Post13)

It was also expressed by talking behind people's backs, harboring hatred, having a negative impact on someone, or being disrespectful to them, including disrespecting their rights. Overall, the students seemed to miss the action of wanting to alleviate the suffering of others.

Group A - Midpoint Changes

Looking at baseline in comparison to the midpoint, the students in this group (who have only been exposed to the developmental education at this point) did not show much of a change. At baseline, they described compassion for others as being loving, caring, helpful, and kind. At the midpoint, most students still considered compassion for others to be about being loving, caring, and kindness. At baseline, students described as not showing compassion to others as bullying, hitting, being cheeky, and calling names. At the midpoint, students still described it as bullying and being mean, but more students described it as treating people badly, picking on people, or being discouraging to people.

Group B

In the pre-test in Group B, while referring to compassion for others, students mentioned adjectives like being loving, caring, kind, peaceful, and sharing with others. Compassion for others was also talked about by happiness, courtesy, respect, and trust. An example of what a student responded:

Q: Compassion for others is about _____

A: It's about loving, sharing, trusting, and helping each other (Post19)

In the mid-test when answering questions about what compassion is for others, most students in Group B answered that it is about being kind, caring, and loving, but also by being helpful. This portrayed a better understanding of compassion for others as the idea is not only caring for others but that coupled with the wish to help others. In the post-test, students also reiterated the idea of trying to alleviate the pain of others by bringing others in when they are left out. One student gave responded by saying this when referring to what compassion to others is not about:

Being rude, bullied, leftout [sic] and if the person is feeling left out, someone can always help them and they can be friendly and not bullied (Post 29)

Although the changes were still subtle, overall the students' view seemed to show a better understanding of what compassion can look like in encounters with other people.

Group B - Midpoint Changes

Comparing Group B students (who had undergone compassion training) baseline to the midpoint, there were differences. As stated above, they seemed to transition from just thinking about compassion for others is only loving and kindness, to expanding that also to being caring, sharing with others, being helpful, and polite. While describing what compassion is not, students

also included that not listening, leaving others out, and being careless did not make for compassionate individuals. These adjectives and verbs used means for a deeper understanding and concern for others feelings. The students in Group B seem to be tapping into feelings of empathy while describing what they think compassion for others can be about.

Global Changes (Groups A & B)

The students in group B had a seemingly much more competent level of describing compassion for others in comparison to the students in Group A. The students in Group B seemed to have a better understanding of other compassion being able to connect their feelings with the wish to help others. The students of Group A seemed to lack the action element to compassion for others even though they could describe many feelings of what compassion for others looked like and did not look like.

But, over the course of the intervention, both groups started to exemplify a working knowledge of what compassion for others is and is not. They all were able to pinpoint different adjectives and verbs that they connected to what compassion means. Combined, the students see compassion for others as being caring, kind, loving, and helpful. They see compassion for others as not bullying, being disrespectful, talking about others behind their backs, and hurting others.

Self-Compassion

In this study, self-compassion is defined as a positive and caring attitude towards oneself when confronted with failure or shortcoming. This was included when respondents referred to compassion specifically about the self, which could also include things like the aspects that go

into taking care of themselves and their bodies. This code was excluded when the students referred to aspects of compassion surrounding others or the Earth.

Group A

The students in Group A demonstrated a competent level of understanding what it meant to show compassion to yourself. At baseline, during the pre-test, a lot of students described self-compassion as caring for yourself, looking after yourself, or not being hard on yourself, as exemplified by this student's response:

- Q: Compassion for yourself is about
- A: For being kind and nice to yourself
- Q: Compassion for yourself is not about
- A: Being hard on yourself (Pre6)

A few other students commented on how compassion for yourself is focusing on your body's physical needs, while also stating that compassion for yourself is not exemplified by being lazy, eating junk food, or being dirty. At the midpoint, compassion to yourself was again often described as caring for yourself, looking out for yourself, and accepting yourself. It was not about hating yourself or causing self-harm. An example of this type of response:

- Q: Compassion for yourself is about _____
- A: Looking after yourself (Post12)

By the post-test, students were mentioning loving themselves, looking after themselves, and having self-confidence when it came to compassion for self. Not showing compassion to yourself was mainly described as taking part in some sort of self-harm or not loving, believing in, or

accepting yourself. It also included putting yourself down, giving up on your goals, and thinking you are less than. Many students responded with statements like the following:

Q: Compassion for yourself is not about _____

A: Hurting yourself on purpose (Post11)

Group A - Midpoint Changes

In comparing baseline to the midpoint, many students (who had only undergone developmental education at this time) were consistent in that compassion for self was being caring towards themselves, being kind to oneself, and looking after themselves. The students did, however, transition from what they described compassion as not being. At the midpoint, the majority of students spoke of what compassion was not with things like self-hatred, feeling like nobody, not accepting oneself, or treating yourself well. At the midpoint, there was also much more mention of self-harm than at baseline.

Group B

In the pre-test, students in Group B mainly reflected on showing self-compassion was by being good to yourself, taking care of yourself, and being kind, caring, and loving towards oneself. For example, one student stated:

Q: Compassion for yourself is about _____

A: Be good and take care of yourself (Pre23)

When it came to not showing yourself compassion, many of the students focused on letting yourself down or actively putting yourself down. A few of the respondents remained unsure with what to answer when it came to both questions surrounding the topic of self-compassion at

baseline. During the mid-point evaluation, students referred to self-compassion as being nice, kind, and loving to friends and family. Students also mentioned being kind, trusting, sharing, and fair. These seemed to be outwardly-focused and not necessarily about treating yourself with compassion. At the midpoint, the majority of students attributed what self-compassion is not also to others (i.e. fighting with others, bullying others, teasing others, or being cheeky). When the students responded about what self-compassion is not during the mid-point test, they made references to self-harm or being upset with themselves. One student stated:

Q: Compassion for yourself is not about _____

A: Beating yourself up for something you feel bad about (Post21)

In the post-test, it seemed like a few students started to gain more of an understanding of what compassion for self the meant, but most still focused on their interactions with others. Similarly to in the pre-test, in the post-test, a lot of students indicated that self-compassion was about looking after yourself and not showing self-compassion was about not looking after yourself.

Group B - Midpoint Changes

Comparing baseline to the midpoint, the students (who had undergone compassion training) students referred to self-compassion overwhelmingly as being good to yourself, caring, and loving. They also said that it was not about letting yourself down or putting yourself down. Transitioning to the midpoint, the students began to attribute self-compassion to others. Much more of the responses surrounded the way they treat their friends and family, as mentioned above. That being said, many more students after the first half of the intervention felt more comfortable answering the questions and not as many left them blank.

Global Changes (Groups A & B)

The students of Group B had a less competent understanding of what self-compassion meant in comparison to Group A. The students of Group B still seemed to be unsure of all the ideas behind self-compassion, often attributing self-compassion to others or simply not answering the questions. The students who received compassion training last (Group A), seemed to have the best understanding of the cultivation of self-compassion overall. Both groups highlighted that compassion for yourself is about caring for yourself, looking out for yourself, and not letting yourself down.

Compassionate World

In this study, the code for a compassionate world is a determination if the students considered the current world we live in to be filled with compassionate people. They were asked the dichotomous question during the pre and post-test, "Do you think we live in a world that is compassionate?" Followed by "I think this because ____" and then "This makes me feel ____."

This series of questions was then followed by another question that also helped to determine or solidify if students thought we lived in a compassionate world. They were asked to draw two pictures, Picture 1 which should depict a world with compassion, and Picture 2 which should depict a world without compassion. They were then asked to pick which picture they thought our current world represented.

Group A

In the pre-test, the majority of students in Group A were unsure if they believed we lived in a world that is compassionate. Only one student believed that they currently lived in a compassionate world saying in response to the follow-up questions:

Q: Do you think we live in a world that is compassionate?
A: Yes
Q: I think this is because
A: We have the odd couple that would destroy the world but there is more that care for
the world
Q: This makes me feel
A: Like I am not the only one who cares about the world and how it ends up (Pre15)
There were three students responded that we do not live in a compassionate world. One student
responded saying:
Q: Do you think we live in a world that is compassionate?
A: No
Q: I think this is because
A: Some of the people in the world respect it but they keep breaking the environment,
killing the animals and not respecting the people
Q: This makes me feel
A: This makes me feel dissapointed [sic] because the world should realize what it is
doing (Pre9)

The students also were split on the decision about living in a compassionate world based off of their drawings. As shown in the table below, four students responded that the compassionate

world picture is the one our world is represented by today, five responded that the non-compassionate world is what is representative of our world today, and six students answered that they did not know.

In the post-test, the majority of students of Group A believed that no we do not live in a world that is compassionate. The shift from the unknown to the shift to definitively stating an answer could reflect the knowledge they received over the course of the intervention. The students were also split evenly between which picture they believed best represented our current world with six students answering Picture 1, six students answering Picture 2, and only two students answering that they did not know. The breakdown of the results from Group A can be shown in the tables below:

Group A:

Pre - 15 respondents

Post - 14 respondents

Compassionate World

	Yes No		I don't know
Pre	1	3	11
Post	3	7	4

Key:

Picture 1 = compassionate world

Picture 2 = world without compassion

Visual Representation

	Pic 1	Pic 2	I don't know	
Pre	4	5	6	
Post	6	6	2	

Group B

In the pre-test, the majority of students answered that they did not know if they lived in a compassionate world or not. Only one student answered that no they did not think we lived in a world of compassion stating:

Q: Do you think we live in a world that is compassionate?

A: No

Q: I think this is because
A: Too many wars
Q: This makes me feel
A: Alright (Pre 24)

Like the students in Group A, in the post-test, most students in Group B were now able to definitively state if they felt they lived in a compassionate world. Being able to identify yes or no to these questions makes it seem that students were more able to clearly define what it means for a world to be compassionate and for people to be compassionate. Only one student answered they were still unsure about living in a compassionate world in the post-test saying:

O.	Do 1	งดน	think	we.	live	in	a	world	that	is	comp	assiona	ate?
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A: Yes and No

Q: I think this is because _____

A: There are some people who give to homeless people

Q: This makes me feel _____

A: Happy (Post15)

The breakdown of the results from Group B can be shown in the tables below:

Group B:

Pre - 13 respondents

Post - 16 respondents

Key:

Picture 1 = compassionate world

Picture 2 = world without compassion

Compassionate World

	Yes	No	I don't know
Pre	4	1	8
Post	7	8	1

Visual Representation

	Pic 1	Pic 2	I don't know
Pre	7	3	3
Post	4	7	1

Global Changes (Groups A & B)

Both groups shifted out of uncertainty on the determination behind living in a compassionate world or not. While not all respondents believed if we lived in a compassionate world, the shift to be able to differentiate the different aspects of what a compassionate world looks like was noticed in both groups.

Changemaker Ability

The code for the changemaker ability is based on the notion if students think that they or people like them have the power/knowledge/experience to make a difference in the world. It is included for all of their thoughts on if they believe people who are like them can make a change in the world. The question posed during the pre-test and post-test asked, "Do you think young people like yourself can make the world Compassionate?" That question was then followed by "I think this because " and then "This makes me feel ."

Group A

In the pre-test, the majority of the students believed that they could make the world compassionate. One student, who agreed that they had the ability to change the world said:

"Children can choose if they want to help or if they don't. I think adults should encourage kids to be compassionate about the environment. Some already do!" (Pre6)

Only two students said that they were unable to make the world compassionate and four students were unsure if they had the ability to make the world compassionate. However, in the post-test, all of the students said that they or people like they did have the ability to change the world and make it a more compassionate place. While the post-test showed that students still felt the world

we live in is not always compassionate, everyone responded with them believing that they or people like them could change the world to make it more compassionate.

Group A:

Pre - 15 respondents

Post - 14 respondents

Changemaker Ability

	Yes	No	I don't know
Pre	9	2	4
Post	14	0	0

Group B

During the pre-test, the majority of students Group B saw themselves and people like them as able to make changes in our world to be more compassionate, but four students were unsure and one answered no. One student answered,

Even if you are as small as an ant, you can still make a difference (Post18)

These answers also gave light to how they viewed themselves in relation to others in the world and the idea of common humanity and the shared global experience.

Group B:

Pre - 13 respondents

Post - 16 respondents

Changemaker Ability

	Yes	No	I don't know		
Pre	8	1	4		
Post	9	3	0		

Global Changes (Groups A & B)

The students in Group A seemed to have higher confidence in their ability to be an agent of change in comparison to Group B. All of the students in Group A believed that they or people like themselves could be changemakers, while students in Group B were not as confident. In both Groups A and B, having all of the students be able to identify yes or no to these questions makes it seems that students were more able to clearly define what it means for a world to be compassionate, for people to be compassionate, and if they are able to change the world using their learned compassion.

Inductive Themes

There were a few inductive themes that emerged in the data. These can be found in Appendix 2. They included: "feelings of compassion for others," "physical manifestations of compassion for others," and "awareness to common humanity."

Feelings of Compassion for Others

Throughout the analysis, I thought it was important to separate the feelings of compassion from the physical manifestations of what compassion looks like. It helped me to understand the overall code for compassion and what it means at this age to see if students are connecting feelings of compassion for others and if there are changes in that connection. This also helped to situate and shift the focus of the compassionate experience in ways to see how the feeling and physical manifestations are interacting and also working separately.

In this study, the feeling of compassion for others was defined by the expressions of the emotions one feels when thinking about compassion for others. It was included explicitly when feeling and emotions are mentioned and not when physical manifestations were mentioned. Some of these positive feelings expressed in both groups included love, trust, respect, care, kindness, fairness, peace, courtesy, happiness, friendliness, encouraging, and thoughtfulness. One student expressed, "Sharing, trusting, forgiving, respecting, caring, and being fair and kind" (Pre 27). The negative feelings or emotions that were expressed by the students in both groups were being cheeky, rude, mean, or having hatred.

Physical Manifestations of Compassion for Others

In this study, the physical manifestation of compassion for others was explained by the expressions of the physical ways compassion for others is shown. This was to be included when a respondent referred to the physical ways that they think compassion for others is shown. There were both positive and negative physical manifestations described by the students. Some of the positive physical ways compassion is shown to others included being helpful, gentle, sharing, and giving. These were helpful in identifying when the students reached the level of competence to recognize that compassion for others is not just about loving or caring for others, but that they can deepen their experience by recognizing that they can do something to help alleviate the pain and suffering others may be experiencing. As for the negative manifestations, across both groups, these were exemplified by bullying, fighting, pushing, hurting, and name-calling. In both groups, as the students learned more about compassion for others, they seemed to begin to recognize that their physical actions and words can have an effect on others.

Discussion

The aim of this study was to identify how compassion is learned and examine the influence of compassion training on knowledge of compassion in primary school-aged children. The study was designed to examine, in educational settings, if compassion cultivation could aid in a further understanding of compassion and if this influence can actually lead to a change in prosocial skills and behaviors. We found that there were subtle shifts in language that highlight that the process of learning compassion was started. The findings in this study are consistent with prior studies and literature suggesting this. While there are links to compassion and the importance of its cultivation, there need to be better measures in order to effectively measure the changes in behavior. The major findings of this study are centered around three major topics that work to fill the gaps in what is not known about compassion cultivation. These topics include the elevated understanding of getting to the stage of well-being, a heightened sense of personal confidence, and a shift in the language being used that could potentially lead to future behavior changes.

Well-Being

Studies have shown the compassion may be essential for individual well-being.

Compassion cultivation is important for children to be thinking about themselves and others in relation to the world. Overall, in this study, the students who underwent this eight-week intervention seemed to gain different levels of understanding of the different aspects of compassion. Based on their responses, this study showed that there is potential to bolstering and improving interpersonal relationships as a result of the intervention. Students were able to think

about the ways in which they interact with others and how that can affect others, even those outside of their immediate circles. While thinking about self-compassion, students were able to write about the different practices that they could employ surrounding the idea of being good to yourself that could ultimately help reduce their anxiety, stress, and control their negative emotions. While we cannot specifically measure a change in behavior, these results are in agreement that these changes in language have the ability to transition into lifelong behavior changes over the course of one's life.

Confidence

Few prior studies have examined the broader effects that compassion cultivation can have on improving prosocial behaviors, reduction in stereotyping or bias, changes in self-esteem or self-worth, or other improvements related to positive health outcomes (Keyes, 2007). The study addressed some of what we do not know about the influence of compassion cultivation skills in youth. This study found that the student's personal belief that people like them can change the world increased after the intervention. When prompted with the question "Do you think young people like yourself can make the world Compassionate?" an overwhelming majority of students said that they could. They commented on how even at this young age, they can make a difference. This confidence in their ability to be agents of change in the world to make it more compassionate can stem from what they now believe about their self-concept and their abilities, their awareness to humanity as a whole, and the importance of creating a compassionate world. There is a need for improving outcomes of measures of well-being for this population. The results of this study show that there should be a push for these effects to be further examined. Seeing as the students responded with high rates of self-esteem and an understanding of not

singling other out because of their differences, this can be the influence that can lead to positive interpersonal relationships, the promotion of positive mental health, and overall lifelong flourishing. Situating this is previous literature adds the the conversation that youth populations can start to learn how compassion can influence their knowledge and may be essential to overall lifelong well-being.

Language and Behavior

Previous studies have shown that there is a need for a greater understanding of the influence of compassion training of cultivating the skills that support longer-term effects of individual well-being. This study works to fill this gap by providing insight into how compassion is learned and understood. Results showed that the students were able to be more comprehensive in their understanding of compassion based on the language they used throughout the surveys. As explained in previous studies, this expanded knowledge in compassion understanding shows that the cultivation of compassion is important and may have protective components for stress and dealing with emotions, but behavior shifts cannot be measured. Although we may be seeing a subtle shift in the language used, the behavior may not be changing. In many studies, we know that exposure does not necessarily equal behavior change. In this study, it seemed hard to capture behavioral or psychological changes. This addresses the existing need for creating measures for capturing the possible changes in behavior over time.

Limitations

The overall challenge in these interventions is giving young students the knowledge about compassion and assessing these changes in knowledge. Based on these results, we do not

know for certain if these compassion training lessons translated into effective changes that might promote more positive health and well-being. This is, however, telling us that there are major limitations in this field that need to be addressed and there is a strong need to have better measures in learning how these lessons will affect behavioral outcomes and changes.

In addition to the lack of ability to be able to measure those shifts in behavior, one limitation of this study can be possibly attributed to the short time frame. This could mean that there could be a need for extended exposure to the lessons of compassion and developmental education. An eight-week period may be too short for this age group to fully grasp and be able to shift common behaviors and practices, especially in a way that can be measured in the future. More work should be done in learning how long it can take for this age group of children to not only be able to retain something that they learned but then transition into employing these practices.

Significance to Public Health

In most previous cases and studies, only attention, mindfulness, and empathy are mentioned in these discourses in public health. But, these are not to be conflated with compassion, as the goal of this study was to specifically identify what compassion is and how it can be measured. The significance of this study is to learn if the cultivation of compassion and development of prosocial skills and behaviors can aid in promoting positive health outcomes for this young population.

This research is significant to the field of public health because this intervention seeks to promote skills that can be beneficial to positive health outcomes and be protective against various negative health outcomes. Building off of what we currently know to be true of SEL

programs and their effects, these findings support and add to our understanding of what this means in regards to the health and well-being of this population. The inclusion of compassion training in academic spaces in public health discourse provides a large-scale way of disseminating information and promotes the use of these strategies in future interventions for these populations. This study can lead to the creation of effective, reliable, and validated measures and interventions specifically for this age group. This study is intended to contribute to the body of research in developmental psychology, positive psychology, as well as contemplative practice for this age group. The measures of stress, emotional regulation, perspective-taking, prosocial behaviors, and stereotyping and bias are all needed for future designs of these studies.

Conclusion

This study is a step in understanding what is needed to designing future compassion cultivation interventions in the future. These results show that children of all ages can benefit from learning and understanding the importance of compassion for themselves, others, and people around the world. Future efforts to make compassion cultivation available to a larger sector of students around the world in educational settings. This study hopes to contribute to the development and eventual validation of measures that can be used to assess what impact compassion training has on young children.

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Appendices

Appendix 1. Pre, Mid, and Post Test Qualitative Survey

The students were given a pre, mid, and post-test containing questions around their knowledge of compassion.

Γh	e pre	e-test consisted of 15 questions:
	1.	Q1: Compassion for others is about
		Q2: Compassion for others is not about
	3.	Q3: Compassion for yourself is about
	4.	Q4: Compassion for yourself is not about
	5.	Q5: Compassion for the Earth is about
	6.	Q6: Compassion for the Earth is not about
	7.	Q7: Do you think we live in a world that is compassionate?
	8.	Q8: I think this is because
	9.	Q9: This makes me feel
	10.	Q12: Which of your pictures do you think the world is most like today?
	11.	Q13: Do you think young people like yourself can make the world Compassionate?
	12.	Q14: I think this because
		Q15: This makes me feel
Γh	e mi	d-test consisted of 4 questions:
	1.	Q1: Compassion for others is about
	2.	Q2: Compassion for others is not about
	3.	Q3: Compassion for yourself is about
	4.	Q4: Compassion for yourself is not about
Γh	e po	st-test consisted of 11 questions:
		Q1: Compassion for others is about
	2.	Q2: Compassion for others is not about
	3.	Q3: Compassion for yourself is about
		Q4: Compassion for yourself is not about
	5.	Q5: Do you think we live in a world that is compassionate?
	6.	Q6: I think this because
		Q7: This makes me feel
	8.	Q8: Which of your pictures do you think the world is most like today?
	9.	Q9: Do you think young people like yourself can make the world Compassionate?
	10.	Q10: I think this because
	11	O11: This makes me feel

Appendix 2. Qualitative Codebook

#	Code	Subcode	Code Type	Definition	Inclusion/Exclusion Criteria	Keyword Examples	Example quotes
1	Compassion for Others		Deductive	Noticing the suffering of another coupled with the wish to alleviate it.	Include when the respondent refers to the different characteristics they feel is compassion for others. Exclude when respondents speak of compassion for self or for Earth.		"Loving everyone and having diversity and treating everyone the same. This makes us feel warm and fuzzy" -Mid11 "It's about loving, sharing, trusting, and helping each other" -Post19
2	Self- compassion		Deductive	The positive and caring attitude towards oneself when confronted with failure or shortcoming.	Include when the respondent refers to compassion about self, including the aspects that go into taking care of their own body		"Compassion for yourself is about caring for yourself and fulfilling your body's needs" - Pre9 "Q: Compassion for yourself is not about
3	Compassion for the Earth		Deductive	Noticing the effects that humans have on the Earth and the wish to alleviate it.	Include when the respondent refers to compassion specifically about the Earth (ex. the dislike of littering).		"Being nice to the world and recycling and not littering, saving energy and looking after the environment" - Pre13 "Polluting it, not looking after the world and destroying it" - Pre2
4	Compassionate World		Deductive	Thoughts on if the world is a place that is filled with compassionate humans.	Include when the respondent refers to the question if they believe the world is a compassionate place or not.		"[Yes] Most of the people in this world are caring to each other but you have the odd ones that would bully" -Post7 "[No] Not all of the world is like this and sometime we are not compassionate ourselves" -Post9

5	Changemaker Ability		Deductive	Thoughts on if they believe people who are like them can make a change in the world.	Include when the respondent refers to the ability to make a difference.		"Even if you are as small as an ant, you can still make a difference" -Post18
6	Resilience		Deductive	The ability of an individual to withstand and rebound from adversity and also communicate our vulnerability.	Include when the respondent refers to instances where they went through an adverse experience and found a way to overcome it.		Although this is a lesson from the intervention, no mention was made specifically about this code.
7	Empathy		Deductive	The ability to notice the subtle verbal and non-verbal signals people give off that let you know what they need or want.	Include when the respondent refers to instances where they were able to notice and understand signals from others' thoughts, feelings, or emotions.		Although this is a lesson from the intervention, no mention was made specifically about this code.
8	Interdependenc e		Deductive	The concept that things and events do not arise without a context, but instead of depend on an array of other things and events for their existence	Include when respondent refers to being able to understand that events are contextualized in all of existence.		Although this is a lesson from the intervention, no mention was made specifically about this code.
9	Feelings of Compassion for Others		Inductive	Expressions of the emotions one feels when thinking about compassion for others.	Include when feelings and emotions are mentioned. Exclude when physical manifestations are mentioned.		
9.1		Positive Feelings	Inductive	Positive feelings and emotions expressed in regards to compassion		Love Trust Respect	"Sharing, trusting, forgiving, respecting, caring, and being fair and kind" - Pre27

				for others.		Caring Kind Fair Peace Courtesy Encouraging Happy Friendly Thoughtful	
9.2		Negative Feelings	Inductive	Negative feelings or emotions expressed when compassion is not shown to others.		Cheeky Hatred Rude Mean	"Being cheeky, bullying, not sharing, and teasing" - Mid6
10	Physical Manifestations of Compassion for Others		Inductive	Expressions of the physical ways compassion for others is shown.	Include when the respondent refers to the physical ways that compassion for others is shown.		
10.1		Positive Manifestat ions	Inductive	Positive physical ways compassion is shown to others.		Helpful Gentle Sharing Giving	"Compassion is about caring for people and helping people" -Mid19
10.2		Negative Manifestat ions	Inductive	Physical ways compassion is not shown to others.		Bullying Fighting Pushing Hurting Name- calling	"Bullying, fighting, and being cheeky" -Mid14
11	Changemaker Ability	Service to World/ Humanity	Inductive	The will or motivation to help make a difference in the world.	Include when the respondent refers specifically to wanting to make a change in the world.		"Children can choose if they want to help or if they don't. I think adults should encourage kids to be compassionate about the environment. Some already do! " - Pre6

12	Awareness of common humanity	Inductive	Awareness of themselves and others in relation to the world/common humanity. The recognition that the human condition is imperfect, and that we are not alone in our suffering.	Include when the respondent expresses an awareness to the shared experience of humanity and their role in it.	
13	Lack of awareness of common humanity	Inductive	Lack of awareness of themselves in relation to others and the world.	Include when respondent specifically refers to not being a part of the global experience.	"Well good because its normally good things that happen to me, not bad" -Post5

Appendix 3. Tables of Compassionate World Responses

Group A (8B):

Pre - 15 respondents Post - 14 respondents

Compassionate World 8B

C CITIPU			Ī
	Yes	No	I don't know
Pre	1	3	11
Post	3	7	4

Visual Representation 8B

	Pic 1	Pic 2	I don't know
Pre	4	5	6
Post	6	6	2

Changemaker 8B

	Yes	No	I don't know
Pre	9	2	4
Post	14	0	0

Key:

Picture 1 = compassionate world Picture 2 = world without compassion

Group B (8C): Pre - 13 respondents Post - 16 respondents

Compassionate World 8C

	Yes	No	I don't know
Pre	4	1	8
Post	7	8	1

Visual Representation 8C

	Pic 1	Pic 2	I don't know
Pre	7	3	3
Post	4	7	1

Changemaker 8C

	Yes	No	I don't know
Pre	8	1	4
Post	9	3	0