Compassion and Human Development: Current Approaches and Future Directions

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Abstract

The authors' aim in this article is to stimulate thinking and a new generation of scholarship on how compassion develops over the life span and may be cultivated to improve individual and societal health, well-being, and interpersonal relationships. The authors discuss conceptualizations of compassion, overview research on the development of compassion, and outline prospects for prevention and health-promotion efforts focused on the cultivation of compassion in children, adolescents, and caregivers. The authors note little programmatic work has been done with regard to providing compassion training to children and adolescents and see this as an area ripe for more exploration. The authors conclude by proposing future directions for research on compassion and human development.

Aims and Approach

Compassion is increasingly a topic of scientific interest (e.g., Seppala et al., 2017) Although prosocial qualities like compassion were once considered to reflect individual-difference traits with fixed biological roots, there is now promising evidence of developmental- and training-induced plasticity in the elements of compassion from early in life onwards (e.g., Flook, Goldberg, Pinger, & Davidson, 2015; Schonert-Reichl et al., 2015; Spinrad & Eisenberg, 2017). In this article, we call for more research on the naturalistic development of compassion across the life span, as well as the use of such research in informing a new generation of compassion-focused prevention and health promotion efforts.

In an effort to advance developmental research and prevention in this area, we outline a developmental contemplative science (DCS) perspective in which theories of compassion and practical insights regarding its cultivation derived from contemplative traditions (Lavelle, 2017). are integrated with scientific theory and research on the development of compassion and how it might be cultivated across the life span (e.g., Greenberg & Turksma, 2015; Roeser & Eccles, 2015). Consistent with a life-span developmental approach (e.g., Baltes, Reese, & Nesselroade, 1977). DCS aims to (1) describe the way compassion develops—in terms of changes in its elemental features and forms across the life span, (2) identify the antecedent biological and social factors that explain naturalistic variation in the elements and forms of compassion within and across individuals during different developmental periods, and (3) translate basic descriptive and explanatory knowledge into a new generation of practices, programs, and policies aimed at cultivating compassion and preventing impediments to its development. At this juncture in history, we are particularly interested in knowing if compassion, and other prosocial qualities like trust, kindness, and cooperation, can be nurtured for the benefit

of individuals, families, communities and whole societies. To explore this question, we overview (1) conceptualizations of compassion, (2) research on the development of compassion, (3) prospects for training compassion, and (d) future directions for research and practice.

Conceptualizing Compassion

Diverse conceptualizations of *compassion* exist in the sciences and contemplative traditions. Here, we highlight four ideas useful in framing a developmental contemplative science perspective on compassion: (1) though definitions of *compassion* vary, there is some agreement on the constituent elements of compassion and impediments to compassion (see Table 1); (2) there exist different forms of compassion, distinguished from one another by their motivational underpinnings, developmental origins, scope of attainment in the population, and spheres of empathic concern (see Table 2); (3) compassion develops, and its elements and forms are shaped, fundamentally by experiences of care with other people in sociocultural contexts; and relatedly (4) the cultivation of compassion in children, young adults, and caregivers involves various modes of care and related compassion practices in which the receiving and extending of care to self and others is central (see Figure 1).

Definitions of Compassion. Diverse conceptualizations of *compassion* exist within philosophic, scientific and contemplative traditions (Gilbert, 2017). The Free Dictionary (2018) defines *compassion* as "deep awareness of the suffering of another accompanied by the wish to relieve it." Similarly, the 14th Dalai Lama (1995) defines *compassion* from a Tibetan Buddhist perspective as "an openness to the suffering of others with a commitment to relieve it." Operationalizing this definition for scientific and secular purposes, Thupten Jinpa (2012) defined *compassion* as an other-oriented mental state, endowed with a sense of concern, that focuses on another and wishes for that person to be relieved of suffering. On this view,

compassion is described as having four distinctive aspects: (1) a cognitive-empathic aspect (an awareness of suffering), (2) an emotional aspect (an empathic concern in which one is moved by perceived suffering), (3) an intentional aspect (a wish to see that suffering alleviated), and (4) a motivational aspect (a readiness to help to relieve suffering; see Jazaieri et al., (2013)

Scientifically, compassion has been conceptualized as an evolved emotion and as an aspect of a broader evolved motivational system associated with care. With regard to the former view, Goetz, Keltner, and Simon-Thomas (2010) define *compassion* as "the feeling that arises in witnessing another's suffering that motivates a subsequent desire to help" (p. 31). On this view, compassion is a distinctive and evolved "complex affective state associated with specific situational appraisals, nonverbal displays, subjective experience and autonomic physiology" (p. 352) that functions to facilitate caregiving with offspring and cooperation with others.

Other scientists conceptualize compassion as a specific prosocial motivation that is part of a broader care system associated developmentally with the attachment bonds between parents and offspring, and evolutionarily with the receipt and extension of care, protection, and assistance among mammals, their offspring, and others (Gilbert, 2017) Mayseliss, 2016). This perspective suggests compassion develops from more basic elements and related experiences around care across the life span (e.g., Eisenberg, Fabes, & Spinrad, 2006). Developmental foundations of compassion include felt security and trust, distress tolerance, empathy, sympathy, and so on—all of which are transformed (or not) across time into compassion—the motivational desire for all living things to be free from suffering. Gilbert (2017) posits that this desire, or motivation, is the root of compassion and allows one to approach and engage with suffering. Once engaged, individuals need skills to assist when conditions permit. Similar to Tibetan Buddhist perspectives, such attributes and skills are said to form a multifaceted social mentality

called compassion, "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it" (Gilbert, 2017, p. 11).

Elements of Compassion. Integrating across diverse conceptualizations of fully developed (e.g., adult-like) compassion as a complex mental state and social mentality, Strauss and colleagues (Citation2016) proposed there are five key elements of compassion: (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. We believe these elements can be further conceptualized in terms of various attentional, social-cognitive, and social-emotional processes (see Table 1).

This elemental analysis, focused on mature forms of compassion, raises developmental questions. How do the different attributes and skills characteristic of compassion develop from more rudimentary forms from birth to old age? For instance, 2-year-olds clearly cannot understand the universality of suffering, but they do intuitively perceive the pain/suffering/needs of others in ways that inform their helping behavior (e.g., Warneken & Tomasello, 2007). How can we explain the underpinnings of such caring acts in the absence of the fully developed elements in Strauss et al.' 2016. analysis of compassion (e.g., Svetlova, Nichols, & Brownell, 2010)? As discussed below, a developmental analysis is needed that describes the emergence of compassion from earlier elements of social cognition and caring motivation (e.g., Decety & Jackson, 2006) and explains how social partners and contexts support or forestall the development of these aspects of care and their transformation into more complex forms like compassion over developmental time (e.g., Chernyak & Kushnir, 2018; Gilbert, 2017).

Impediments to Compassion. An elemental analysis of compassion implicitly highlights

key impediments in the development of compassion. For instance, a lack of felt security or trust in interpersonal relationships may impede perspective-taking and recognition of others' suffering (Mikulincer & Shaver, 2017). Similarly, poor emotion regulation skills can lead to empathic distress in the presence of another's suffering in ways that activate self-focused rather than other-focused motives and actions (Batson, 2011; Eisenberg et al., 2006). Alternatively, a person who tends to be immature or self-centered may not have the interest needed to understand the suffering of others or to be moved by it. Even if children or adults feel a strong motivation to assist in a particular situation, they may perceive the costs of acting to be too high, may not know how to help, or may lack the skills needed to overcome the influence of bystander effects or the diffusion of responsibility (e.g., Batson, 2011; Cameron, 2017; Svetlova et al., 2010). A developmental analysis of impediments to care and compassion maps useful targets for intervention and prevention efforts.

Forms of Compassion. Another potential way to inquiry into how compassion develops involves efforts to distinguish between different forms of compassionate behavior. One factor that differentiates different forms of compassion involves the motives underlying them. Research shows that some prosocial behavior is motivated by an intrinsic concern for the welfare of others (e.g., altruism), whereas other extrinsic motives (e.g., aversion to distress, the desire to be liked by others) can also motivate prosocial behavior (Batson, 2011). Thus, determining the nature of the motivation behind prosocial responding, as well as the development of such motives (e.g., intrinsic, extrinsic, internalized), is one way to explore the development of compassion (Batson, 2011; Gilbert, 2017).

Another approach is to explore forms of compassion that differ in the scope of their empathic concern. Along these lines, three basic forms have been identified, and may represent a

developmental continuum: basic, intercultural, global/great compassion (e.g., Ekman, 2009). Basic compassion, or what Ekman (2010) calls "familial compassion," is the most common form and is defined as compassion that is directed towards those physically and psychologically close/similar to oneself (e.g., one's family of origin). Basic compassion is theorized to be rooted in the human care-oriented motivational system (Gilbert 2017). This sphere of compassion is hypothesized to be natural and innate, and to serve the functions of survival and thriving.

Relatedly, individuals' extension of basic compassion beyond the family to include members of their wider "cultural families," those social groups in society with whom they identify as self-similar (e.g., Muslims, New Yorkers, Millennials – see Stets & Burke, 2000), is what we call "cultural compassion." This kind of compassion is hypothesized to be learned implicitly through identity/role socialization in family, peers, and community contexts. Like basic compassion, cultural compassion is hypothesized to be similarly "bounded" in that it reflects a biased extension of compassion to those who are self-similar not in terms of biology but cultural identities. Cultural compassion serves the functions of belonging and solidarity.

Inter-cultural compassion refers to compassion for diverse others who exist outside one's biological and cultural in-groups. This form of compassion, for those from diverse backgrounds different from one's own, is posited to be less common than basic compassion. Inter-cultural compassion is hypothesized to be learned through formal parenting, education, and religious/moral teachings or philosophies that intentionally promote compassion and inclusion together. It can also result from specialized training around issues of power, diversity and inclusion (e.g., Magee, 2016). Unlike basic compassion, inter-cultural compassion is hypothesized to be a "cultivated sphere" – reflecting an effortful extension of compassion beyond those who are self-similar. It serves the functions of social inclusion and equity.

Global and great compassion are hypothesized to be still rarer forms, defined as compassion directed towards all of humanity or all sentient beings (Ekman, 2009). Global compassion is seen when people rally to the aid of strangers caught in a natural disaster or seek to end world hunger. Whereas basic compassion is directed to those who are close (i.e. "me and mine"), global compassion is directed towards all human beings and involves a reflective and heartfelt understanding of the universal desire of all human beings not to suffer and to be happy. *Great compassion* or *Sentience compassion* (Ekman, 2009) is hypothesized as the rarest of forms, and refers to compassion in which the circumference of empathic concern widens again to encompass "all sentient beings" (e.g., plants, animals, insects, etc.). Great compassion is seen only rarely in individuals who manifest great wisdom and love for all beings. In sum, scholars are beginning to identify different categories of compassion. More research is needed to determine if these proposed types describe different *states of compassion* that can arise at any age, *different phases of a developmental sequence* leading to enduring traits of compassion that unfold across ages, or some combination of these.

Development of Compassion

Current research on the development of compassion builds upon prior developmental research on prosocial motivation and behavior (Hoffman, 2000); empathy and sympathy (Eisenberg et al., 2006), the neurobiology of emotion (e.g., Goetz et al., 2010) and social cognition (Decety & Jackson, 2006; Klimecki & Singer, 2017), and parent-child attachment relations (Gilbert, 2017).

The seeds of compassion exist from the beginning of life in social preferences and caring dispositions. Infants as young as 3-months old, for instance, prefer helpers over hinderers (Hamlin, Wynn, Bloom, & Mahajan, 2011). By 12 months, infants show displays of empathic

concern for others; at 16 months, there is evidence of spontaneous, voluntary prosocial behavior; and by 30 months, there is a linkage between individual differences in sympathy (a form of compassionate motivation) and prosocial behavior (see Spinrad & Eisenberg, 2017). In childhood, prosocial behavior gradually becomes less selectively focused on close persons and becomes more generalized to others (e.g., Bloom & Wynn, 2016). In adolescence, the research on age-related changes is equivocal (Spinrad & Eisenberg, 2017). A recent study found declines in compassion across early adolescence, and that females reported more compassion for others and less self-compassion than males (Bengtsson et al., 2016).

The most extensive longitudinal studies show a clear linkage between empathy (i.e., perception of others' feelings) and sympathy (i.e., feelings of concern for others who are in distress). In a series of landmark studies, Eisenberg and her colleagues found that when empathy leads to feeling sympathy, children are more likely to show prosocial behavior. In contrast, when empathy leads to personal distress, less prosocial behavior occurs. Further, children with poorer emotion regulation skills are more likely to show personal distress rather than sympathy when confronted with another's suffering (Taylor, Eisenberg, & Spinrad, 2015).

Research on the developmental neurobiology of compassion also links it to the elements in Table 1. Compassion is linked, for instance, to the development of two distinct neurobiological systems associated with empathy and perspective taking – systems essential for the detection of pain and suffering (e.g., Decety & Jackson, 2006; Klimecki & Singer, 2017). Compassion is also associated with basic motivational systems, specifically the activation of the reward and care/affiliation systems and the deactivation of the threat system (see Goetz et al., 2010; Gilbert, 2017). Finally, compassion is also associated with the prefrontal and parietal cortices and their roles in emotion regulation (Decety & Jackson, 2006).

Biological Antecedents of Compassion. Research suggests that temperamental factors (e.g., emotionality, sociality, shyness) affect prosocial development, both directly in terms of situation selection and indirectly in terms of their influence on emotion regulation (see Spinrad & Eisenberg, 2017). Future research might further investigate gene-epigenetic-environment transactions in the development of compassion.

Social Antecedents of Compassion. Social influences shape the development of the elements of compassion. The security of attachments with caregivers, parenting styles and discipline practices, and parental affection all influence the development of prosocial behavior, including compassion. Quality of early attachment relationships are associated with emotion regulation and prosocial motivation (e.g., Gross, Stern, Brett & Cassidy, 2015). Further, adults with a secure attachment style show greater compassion and prosocial behavior (Mikulincer & Shaver, 2017). The quality of care a child/adult receives probabilistically forecasts the quality of care they extend to others, on average, through a cascade of positive developmental events. This is a key insight– children need opportunities to learn the skills of extending compassion to others, and they also need opportunities to receive care in order to learn to care (Makransky, 2007).

Eisenberg, VanSchyndel, and Hofer (2015) also documented parenting practices in childhood that predict later sympathy and prosocial responding. These include parental warmth, positive affect, and inductive discipline practices in which empathy and reasons for why one behaves in personally and socially responsible ways are salient. These results and others suggest that caregivers who model kindness and generosity, afford children relational security, support their emotion regulation and foster their empathy and understanding of the consequences of their

actions, are supporting the development of the elements of compassion (e.g., Blake et al., 2016; Hoffman, 2000).

Schools, community programs, and faith-based institutions also shape the development of elements of compassion, including the awareness of others, learning about other people in ways that leads to a sense of shared humanity, and caring behavior (Eccles & Roeser, 2015). For example, research in schools shows that student's prosocial motivation and behavior can be promoted through curricula focused on themes of care, and direct student engagement in the life of the school through cooperative learning projects; the creation of norms and classroom rules; and efforts to resolve conflict peacefully. These experiential approaches create a caring and participatory school community that positively influences students' motivation to learn, felt belonging, and prosocial behavior (Schaps, 2003). Social-emotional learning programs and positive youth development programs have also proven effective in teaching students certain social skills implicated in compassion (e.g., emotion regulation – see Durlak et al., 2011). Research shows that service learning with reflection, and opportunities to volunteer and give back through programs in schools, community- or faith-based organizations, can increase adolescents' sense of shared humanity and prosocial motivation and behavior (see Eccles & Roeser, 2015). In sum, research is beginning to reveal plasticity and increased interconnectivity between the elements of compassion over time (see Table 1), and how complex transactions among (a) biological factors; (b) social-structural and socialization factors; and (c) human agency instigate or impede the development of compassion.

Modes of Compassion Cultivation

Given that there is developmental plasticity in the elements of compassion, is there any evidence of training-induced plasticity as well? Can compassion be cultivated, and if so, how?

Several recent developments bear on these questions. First, the number of programs intended to cultivate compassion in adults (and in some cases, children and adolescents) continues to grow. Such programs include Compassion Cultivation Training (CCT), Cognitively-Based Compassion Training (CBCT), Cultivating Emotional Balance (CEB), and others (see Lavelle, Flook & Gharamani, 2017). Second, a recent meta-analysis reviewed 21 randomized control trials of adult-focused compassion-based interventions and found program participation was linked to increases in compassion, self-compassion, mindfulness, and well-being, and reductions in anxiety, depression, and distress (Kirby, Tellegan, & Steindl, 2017). Overall, effect sizes were moderate. Only pilot studies of compassion training with youth exist at this time.

In sum, evidence is beginning to accrue that shows training-induced plasticity in the elements of compassion, including prosocial behavior. Nonetheless, the state of the science is still nascent with adults – and more studies with active control groups, non-self-report measures, and longer-term follow-ups are needed. Importantly, we note that very little work has been done with children, adolescents or their caregivers at this time.

One conceptual approach to cultivating compassion that affords many insights for developmentalists is the model of Sustainable Compassion Training (SCT) (see Lavelle, 2017; Makransky, 2007). In SCT, consistent with evolutionary/developmental approaches to compassion (e.g., Gilbert, 2017), compassion practices are structured according to 3 modes of care: receiving care from others, caring for oneself, and extending care to others (see Figure 1). There is an understanding that each mode of care/compassion empowers the others; that there is an interdependence between receiving and extending care (see Lavelle, 2017). Similar to attachment theory (see Gilbert, 2017), the SCT model emphasizes connection to others and

receiving care as foundational for the extension of care to self and others. There is some research bearing on the various modes and practices outlined in the SCT model.

Receiving Care. The receiving care mode involves the experience and feeling of being deeply seen and heard, valued, and cared for by others in one's authenticity. Receiving care involves the kind of other-originating unconditional positive self-regard that instills a sense of security and confidence in the recipient. This secure base, in turn, seems to allow individuals to better welcome and see others in their full potential and to be a "safe haven" for others in need (e.g., Mikulincer & Shaver, 2017). The receiving-care mode also addresses impediments, for instance, feelings that one is not worthy to receive care, or a belief that one does not need care *from* others to care *for* others. Contemplative practices and skills-training associated with the receiving care mode operate by having individuals recall experiences of "home" or "safe havens," as well as healthy attachment figures (e.g., spiritual figures, pets, friends, family, etc.). By soaking in these memories and experiencing their qualities, such "caring images" practices aim to strengthen the accessibility of feelings of worthiness, safety, social connection and openness that have been experienced. By doing so, they aim to cultivate present-moment awareness of care and its soothing effects. Scientifically, practices that strengthen the capacity to receive care are studied in relation to outcomes like social fears and self-criticism, which, though the evidence is limited, are reduced by such practices (e.g., Gilbert & Irons, 2004).

Self-Care. The self-care mode involves listening and responding to our bodies and minds with heightened awareness, acceptance and kindness in the service of insight, rest and renewal. Self-care practices involve teaching individuals stress-management, relaxation and body-centered strategies to cultivate their capacity to 1) become attuned to the "wisdom" of their bodies, 2) learn to be aware of and manage stress and difficult emotions, 3) process thoughts,

feelings and experiences with awareness and insight, and 4) take better care of their own needs. The self-care mode also addresses impediments, including feelings that there is not enough time for self-care, that it is a luxury or not important, or that it is selfish. Many mindfulness practices are useful for self-care, and aspects of this mode have also been termed "mindful self-compassion." Results show self-compassion programs increase adults' self-compassion and wellbeing (Neff & Germer, 2013; Shahar et al., 2015). Self-compassion programs for adolescents have also been developed and are being evaluated (e.g., Bluth, 2017).

Extending Care. This mode involves the extension of feelings of compassion to others. The extension of care is not framed as an additional obligation but rather as something that flows naturally out of receiving care and extending care to self. Extending care practices strengthen feelings of compassion for close others and also extend the circle of empathic care beyond "in-groups" to those of diverse social background by helping individuals to overcome stereotypes and biases that limit the breadth of compassion. One extending care practice is loving-kindness meditation (LKM). This practice progressively cultivates loving-kindness towards oneself, a friend, a neutral person, a difficult person, then gradually to all of humanity and all beings. Short-term LKM practice (6 hours) has been linked to changes in neural networks associated with social cognition and emotion regulation, and prosocial behavior (Weng et al., 2013). A meta-analysis of LKM with adults showed improvements in emotional processing, empathy, psychological wellbeing and immune function (Hofmann, Grossman and Hinton, 2011). Such practices have been modified for young children (e.g., Kaiser-Greenland, 2010).

Implications for Practice

Although there is a paucity of evidence-based interventions that cultivate empathy and compassion in school-aged children and adolescents (see Lavelle et al., 2017; Weisz & Zaki,

2017), there is now substantial interest in developing compassion-focused programs within the larger fields aimed at bringing mindfulness and social-emotional learning into education (Greenberg & Turksma, 2015; Roeser & Eccles, 2015). What implications can we draw from the work reviewed so far for future prevention and health promotion efforts?

First, consistent with the relational nature of the modes and practices of cultivating compassion described above, programs aimed at cultivating compassion with children, adolescents and adults are most likely to be successful if they afford participants the experience being care for, and skills and practice around self-care, in addition to opportunities for learning skills to extend care to others. Furthermore, participants' sense of safety and community, interpersonal connection to others in the program, and experiences of being seen and heard are hypothesized to be active ingredients in such interventions.

Second, we believe a strategy of "caring for the caregivers"– where parents and teachers are seen as having their own needs to be cared for and to learn self-care-related skills, also seems critical to efforts aimed at cultivating compassion in children. Mindfulness and compassion programs for parents and educators have been developed and shown to increase adult well-being, self-care, and caring for others (see Coatsworth et al., 2015; Jennings et al., 2017; Roeser et al., 2013). Integrating the implementation of programs for adults with the implementation of programs for children and adolescents may be a fruitful systems-oriented approach in future prevention and promotion work in families and schools.

Third, research on how compassion develops suggests that using a variety of modalities of teaching compassion may be helpful. *Adult modeling* of the elements of compassion provides individuals with non-verbal learning opportunities. *Direct instruction* and *inductive discipline practices* can teach emotional vocabulary and help individuals to reason about being

compassionate. *Being generous to others* may reveal the joys of giving that intrinsically reinforce future altruistic and compassionate behavior (e.g., Dunn, Aknin & Norton, 2008).

Fourth, the creation of culturally-competent and developmentally appropriate compassion practices, exercises and activities is an important future challenge in this work (e.g., Nucci, 2001). Approaches to teaching compassion might balance a focus on teaching children and adolescents about shared humanity and appraisals of others as "just like me," with a focus on human diversity and appraisals of others as "different than me." Fostering a simultaneous awareness of and respect for diversity and inclusion, alongside an understanding of universality of the desire not to suffer and to be happy, seems important to compassion-focused efforts in diverse and unequal societies like our own. Such efforts can support young people in building the skills and motivation needed to practice compassion with wider and wider spheres of people in an increasingly interconnected world in the service of mutual respect, cooperation, and social harmony.

Future Directions for Research

We propose 3 future directions for research on the development of compassion. First, a main priority is the creation of comprehensive developmental models across the lifespan to guide the creation of compassion-focused programs and research (see Lavelle et al., 2017). Progress has been made in defining compassion, identifying its elements, impediments, and varying forms. Naturalistic longitudinal studies have begun to identify the course of compassion development, as well as biological factors and social experiences that can promote or forestall it. Logic models based on these are needed to drive program development and the rigorous testing of the effectiveness of practices, programs and policies aimed at increasing compassion.

Second, longitudinal research is needed on the development of compassion (Roeser & Eccles, 2015). Such research might fruitfully focus on identifying windows of opportunity in the lifespan when the elements of compassion may be particularly malleable, and therefore programs may best be able to cultivate particular skills and prevent certain impediments from arising. Such windows may exist in early childhood (the development of executive function), early adolescence (the development of social cognition and self-reflection), and early adulthood (the development of life values and a sense of purpose).

Third, practical questions concerning the facilitation and quality of implementation of compassion training for children, adolescents and adults are needed. For example, is a competent meditation teacher required to impart trainings to others? If so, what defines such "competence" (Crane et al., 2012)? In addition, are technology-driven training models sufficient to teach these skills, or is a live facilitator model or blended model more effective? Studies of innovative school-wide implementation approaches are needed.

Conclusion

Although at one time human qualities like compassion were considered to be personality traits that were genetically determined and fixed, there is now promising evidence of both developmental- and training-induced plasticity in the skills and dispositions associated with compassion. What is needed now is a new vision that generates a wave of scholarship on compassion, its development and cultivation across the lifespan, and the salutary personal and societal benefits that might accrue from such efforts. To do so includes developing comprehensive developmental theories of compassion, programmatic research, and evidence-based programs and policies that cultivate compassion across the lifespan. As an example of what we envision, we described the potential utility of a Developmental Contemplative Science

perspective on compassion and outlined various avenues of research and practice originating from it. Ultimately, many different perspectives will be useful to articulating and realizing the goals of such a vision: evidence showing the personal and social value of supporting the development of compassion in children, adolescents and their care-givers in terms of health, wellbeing and positive relationships, and the use of such qualities to help transform schools, communities, institutions and societies to be more just, equitable, caring and inclusive.

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Table 1
Hypothesized Elements of Compassion and Related Psychological Constructs

Elements of Compassion [Impediments to Compassion]	**Psychological Domain of Functioning**	**Related Psychological Skills and Dispositions**
1. Recognizing suffering [Lack of attention/awareness]	Attention/Awareness	Attentional focus and social awareness
2. Understanding suffering [Lack of understanding]	Social Cognition	Empathy and perspective taking skills
3. Feeling for the person suffering [Lack of concern]	Emotion	Felt security and felt concern for other's welfare
4. Tolerating uncomfortable feelings [Lack of affect tolerance]	Emotion Regulation	Regulation / tolerance of feelings of empathic distress
5. Motivated to alleviate suffering [Lack of motivation/skill]	Motivation and Memory	Prosocial intentions and strategies for action

Table 2
Hypothesized Categories of Compassion and Related Features

Type of Compassion	Sphere of Empathic Concern	Hypothesized Prevalence, Origins and Functions
	BOUNDED SPHERES	
1. Basic Compassion	Family	Common, innate: Survival and Thriving
2. Cultural Compassion	In-groups	Common, learned: Belonging and Social Solidarity
	UNBOUNDED SPHERES	
3. Intercultural Compassion	Out-groups	Less common, learned: Equity and Social Inclusion
4. Global Compassion	Humanity	Rare, learned: Altruism
5. Great Compassion	Sentient Beings	Rarest, learned (?): Wisdom and Love

Figure 1.
Modalities of Care and Examples of Related Contemplative Practices