Chapter 10 Compassion as the Highest Ethic

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Compassion as the Highest Ethic

Ethics are moral principles that guide a person's behavior, and ethics have been at the heart of philosophical, religious, and spiritual discussions for thousands of years. One source for the word "ethic" can be derived from the Ancient Greek word *êthikos*, which means "relating to one's character." Ethical principles provide a framework for people to help make decisions about how best to live their life and what actions are right or wrong in a particular situation. Definitions of ethics typically emphasize the importance of what is the best way for people to live or what is the science of the "ideal" human character (Kidder, 2003). Consequently, ethical codes have been developed and applied in a number of modern-day professions, such as medicine, politics, psychology, law, education, and business. As technology advances, ethics are also becoming of great interest in the development and programming of artificial intelligence (AI). Indeed, current ethical issues inherent in AI developments can inform our understanding of how ethics and compassion are related. By way of example, consider driverless cars. In a scenario where either the driverless car needs to avoid crashing and harming a group of people or avoiding

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and harming the individual in the car—what is the ethical choice, what is the driverless car programmed to do? These are difficult decisions to contemplate, as whose life or lives are more important. In the driverless car scenario, one would often argue from a principle of greater good, thus protecting the group of people and sacrificing the driver. However, would this response change if we were informed that the group of people were criminals guilty of murder and the driver was a parent of two young children? AI developers might argue that the program design would avoid such dilemmas altogether, but how certain can we be? One of the main principles of compassion is to avoid doing harm (Dalai Lama, 1995), and this is where compassion as an ethical guide can be most useful. The focus of this chapter is to suggest that compassion may be our highest ethic, which can help provide the guiding motivation to address life difficulties. Therefore, there are five key parts to this chapter: (1) defining compassion; (2) understanding compassion in terms of evolutionary processes and physiology; (3) examining the benefits of compassion; (4) linking compassion with ethics; and (5) examining how compassion-based interventions are aiming to help aid individuals in making ethically wise decisions.

Defining Compassion

Compassion is a growing area of interest within different fields of research, particularly psychotherapy (Gilbert, 2014; Kirby, 2016). For example, according to Google Scholar, in 2016 the term "compassion" was referred to in a staggering 38,800 publications. Many researchers around the world are responsible for the rise of compassion as an area of scientific enquiry (Ekman & Ekman, 2013; Germer, 2009; Gilbert & Choden, 2013; Keltner, Marsh, & Smith, 2010; Neff, 2003; Ricard, 2015; Singer & Bolz, 2013). As a result, compassion research is being conducted from the differing perspectives of evolutionary science, psychological science, and neuroscience, often in collaboration with spiritual teachers, to enhance our understanding of compassion and its associated impacts.

Compassion has been defined in various ways (Gilbert, 2014; Goetz et al., 2010; Jinpa, 2010; Strauss et al., 2016). Most theorists focus on the preparedness and wish to sensitively attend to suffering and the needs of others, and also the preparedness to do something to help reduce that suffering. Many researchers focus on describing certain qualities and attributes that comprise compassion (Strauss et al., 2016). These qualities include elements such as recognizing and having a sensitivity to suffering, being non-judgmental, recognizing the common humanity of suffering, having empathy, distress tolerance, equanimity, patience and a motivation to act to do something to alleviate and to prevent suffering (Feldman & Kuyken, 2011; Gilbert, 2014; Goetz et al., 2010; Neff, 2003; Strauss et al., 2016). Goetz et al. (2010) specifically define compassion "as the feeling that arises in witnessing another's suffering and that motivates a subsequent desire to help" (p. 351). Geshe Thupten Jinpa, who developed the Stanford Compassion Cultivation Training program, defines compassion as a complex multidimensional construct that is comprised of four components: (1) an awareness of suffering (cognitive component),

(2) sympathetic concern related to being emotionally moved by suffering (affective component), (3) a wish to see the relief of that suffering (intentional component), and (4) a responsiveness or readiness to help relieve that suffering (motivational component; Jazaieri et al., 2013). The notion of self-compassion has received increasing attention with the work of Kristen Neff, who defined self-compassion based on her interpretations of Buddhist teachings as having three components: (1) being mindful, rather than over-identifying with problems; (2) connecting with others, rather than isolating oneself; and (3) adopting an attitude of self-kindness, rather than being judgmental (Neff, 2003).

When reviewing the definition of compassion, it becomes clear how many researchers tend to develop lists of qualities and attributes that are identified as being part of compassion. Some definitions stress the motivational nature of compassion, exploring its goal and focus and the various competencies necessary for that motive to operate successfully. Compassion as motivation is central to many of the contemplative traditions (Armstrong, 2010; Dalia Lama, 1995; Junpa 2015). This is captured in such definitions as having *a sensitivity to suffering in self and others, with a commitment to alleviate and prevent it* (for a review Gilbert, 2014). Importantly, compassion includes three directions: giving compassion to others (e.g., friend, family member), being open and responding to receiving compassion from others, and self-compassion (Gilbert, 2014; Gilbert, McEwan, Matos, & Rivis, 2010; Jazaieri et al., 2014; Neff & Germer, 2013). Viewing compassion as a motive requires an increased understanding of evolution and physiological processes and brain functioning, which provide insights as to why compassion could be regarded as our highest ethic.

Compassion: Evolutionary Insights

One way to help understand compassion is via evolutionary insights into its origins and functioning situated within its neurophysiological architecture (Brown & Brown, 2015; Gilbert, 2014; Kirby, 2016). Theorists suggest that compassion is rooted in the evolved mammalian caring motivational system (Gilbert, 2014; Mayseless, 2016), and motives are a key cause of behavior (Neel et al., 2016). Derived from the Latin word motivus, meaning "moving" or "to move," motives are linked to desires, wishes, and wants; they give rise to specific incentives and concerns, but differ from values and emotions (Klinger, 1977). Emotional arousal or attention evolved as mechanisms to "move" or motivate an animal toward biosocial goals such as to support reproduction or survival (Dunbar & Barnett, 2007). Along with compassion, there are many human motives including self-protection (harmavoidance), sexual (finding a mate and reproducing), and caring-based motives (Bernard, Mills, Swenson, & Walsh, 2005; Gilbert, 2014; Huang & Bargh, 2014). All motives have two basic processes, which when applied to compassion include, (1) having a motive-appropriate signal detection (input) to suffering (i.e., sensitivity and awareness of distress), and (2) having a behavior output repertoire that allows appropriate responsiveness to suffering (i.e., taking action to alleviate and prevent suffering).

Parental investment in evolutionary biology and psychology is a concept that refers to, "any parental expenditure that benefits one offspring at a cost to parent's ability to invest in other components of fitness" (Clutton-Brock, 1991). Animals vary greatly in the amount of parental investment they provide. For example, sea turtles (reptiles) provide no parental investment to their young hatchlings after they are born on sandy beaches, while in contrast humans (mammals) provide the most significant amount, with children needing over a decade of parental investment to ensure their safety and healthy development (Gilbert, 2014). The caring system of humans, and indeed mammals, is a critical motive to enable offspring survival. The caring system motive or compassionate motive (Gilbert, 2014) requires parents to be sensitive to the distress signal of their offspring—for example, noticing a newborn infant that could be crying (first process), and then having the capacity to move toward that crying infant (suffering) so that the infant can be cared for through some kind of soothing affiliative behavior, for example, touch or voice tone (second process). This interaction between care-giver (parent) and care-seeker (infant) then helps facilitate the attachment system between parent and child (see Swain & Ho, 2016), and also demonstrates how affection and affiliative behaviors are fundamental in the affect regulation of mammals.

Many species such as fish, turtles, and other egg laying reptiles produce large numbers of young who need to disperse rapidly afterbirth to avoid predation, including, at times, from their own parents (MacLean, 1985). Thus, fish and reptilian young are born to be mobile, be able to seek their own protection, and be selfsustaining. This is sometimes referred to as r selection. The evolution of warmbloodedness, live birth, small numbers of young, and post birth parental/caring investment, sometimes referred to as k selection, required substantial changes to the physiology of threat avoidance and approach behavior, allowing for close interpersonal contact and connection. To facilitate these interactional sequences, k selected regulation processors operate through a sequence of adaptations. One of these major adaptations was the evolution of part of the myelinated parasympathetic system the dorsolateral vagal nerve that links a range of internal organs to central control systems. Indeed, the vagus is connected to a range of organs including the heart and gut, and with the brain through its link to inhibitory prefrontal-subcortical circuits. One of the key functions of parental investment is sensitivity to distress and preparedness to act appropriately to relieve that distress. This is also the basic sentiment and core of compassion (Gilbert, 2014), and compassion utilizes the same evolved physiological pathways as basic caring behavior.

Compassion: Physiological Processes

It is now well-recognized that a key process that assists with affect regulation is through caring affiliative and affectionate behaviors. Polyvagal theory, outlined by Porges (2007), details how the activation of the myelinated parasympathetic

nervous system helps in the regulation of fight/flight (autonomic sympathetic nervous system), thus enabling calmness and soothing to be achieved through having close proximity to others, giving/receiving affiliative, caring, and prosocial behavior (Davidson, 2012; Depue & Morrone-Strupinsky, 2005; Gilbert, 2014). This is reflected in the dynamic balancing of the sympathetic and parasympathetic nervous systems that give rise to the variability in heart rate (Porges, 2007). Hence, feeling safe is linked to heart rate variability (HRV), and higher HRV is linked to a greater ability to self-soothe when stressed (Porges, 2007). Specific strategies such as breathing practices, friendly voice tones, and facial and body expressions can activate the parasympathetic system, aiming to calm and soothe the individual, which improves heart rate variability (Krygier et al., 2013). Moreover, when the sympathetic system is activated under threat this decreases the ability for higher order cognitive capacities such as mentalizing to occur (e.g., theory of mind, empathizing, perspective taking), whereas activating the parasympathetic system helps provide a feeling of safeness, which increases the ability to activate the prefrontal cortex and enable mentalization (Liotti & Gilbert, 2011; Klimecki et al., 2014; Thayer & Lane, 2000). It is important to distinguish between feelings of safety and safeness. The former is related to being removed from elements that bring the possibility of threat or harm, such as a distressing situation, thought, or feeling. The latter refers to a greater freedom to explore the distress despite the possibility of harm (Gilbert, 2014). Compassion is not about the avoidance of threatening stimuli, rather it involves developing the courage to engage with what we need to do (Gilbert, 2014). Thus, the focus on activating affiliative processing systems (e.g., parasympathetic system) assists in the regulation of affect, and helps calm individuals when distressed.

Compassion: Brain Functioning and Affect Regulation

The human brain is a product of evolution and can be understood in terms of Darwinian "selection for function", and so can many mental health problems. Social processing and early social contexts influence brain development and are central to understanding mental health problems. Relationships based on affection and caring show many physiological and psychological beneficial effects, even on genetic expression (Cozolino, 2007, 2008, 2013; Siegel, 2009). We recognize that as an evolved species many of our basic motives, emotions, and their genetic polymorphisms are products from the challenges of survival and reproduction (Conway & Slavich, 2017). This understanding of how humans evolved as biological, gene-built systems that (phenotypically) adapt to their environments and operate a range of evolved motivation and emotion processing systems has important implications not only for our understanding of mental health difficulties but their prevention and alleviation.

The view that the human brain can be considered as an evolved organ shaped by contextual factors to help with survival and reproduction also warns us that

assumptions like "all is well until something goes wrong" are unhelpful, misleading, and basically often wrong (Brune et al., 2012; Nesse & Williams, 1995). Therefore, our brains although capable of wonderful capacities such as imagination, creativity, and being able to forecast the future and reflect on the past, also comes at a cost, as it permits rumination, worry, and self-criticism, that can underpin so many mental health difficulties (Gilbert, 2014; Kirby & Gilbert, 2016). Moreover, our evolved brain has a number of inbuilt biases, for example, having kin preferences (nepotism), in-group preferences (tribalism), a negativity bias (better safe than sorry), and biased learning (e.g., fear of snakes but not electricity). These biases indicate that our evolved minds, although with many advantages, also have a number of problematic evolutionary trade-offs and glitches. This view is in contrast to the Western medical model of mental health, where the idea is conveyed that there is nothing fundamentally wrong with our mind (i.e., nothing inherently bad or tricky about its evolved construction) and it is only "when things go wrong" that we have mental "disorder," requiring therapies "to correct" and "fix" (Brune et al., 2012).

In contrast, the Buddha highlighted that our *normal unenlightened* states were problematic—that the mind is, in a way, inherently crazy, especially if it lacks compassion (Dalai Lama, 1995). Thus, when presented with ethical dilemmas it can be difficult to make judgments and decisions, due to our "*tricky mind*," and mistakes are made. Importantly, from this perspective one can view our "craziness" as not being our fault, but as a consequence of the evolved human mind, for which we need to take responsibility.

One of the aims of compassion is to help individuals take responsibility for their "tricky mind" by providing psychoeducation on the human mind, specifically regarding how the brain regulates emotions, which can cloud our judgment and decision making. One way to consider emotions, other than individually, is to group them in terms of evolutionary function. For example, we can identify a whole set of emotions whose primary functions are self-protective and defensive, and are triggered in the context of threats but not in the context of being safe or content. Another set of emotions is associated with rewards and acquiring resources and achievements. These functions help to direct and energize individuals to things conducive to their well-being and need to be acquired (e.g., food, shelter). Once acquired however, and without threats, emotions will be conducive to calmness, peacefulness, and "rest and digest." Importantly, the three types of emotional systems need not be mutually exclusive, rather it is referring to the degree to which these blend. This simple three-function heuristic approach to emotions has been suggested by Gilbert (2009, 2014) and is depicted in Fig. 10.1. This model is informed by affective neuroscience research into the evolutionary functions of emotion (Depue & Morrone-Strupinsky, 2005.

These three emotion regulation systems interact and include: (a) the threat/self-protect system, (b) the drive-reward system, and (c) the affiliative/soothing system. Gilbert (2014) and others (Kirby, 2016; Tirch, Schoendroff, & Silberstein, 2014) have emphasized how people (children and adults) often find themselves trapped between the threat and reward systems because of the family environments and the Western culture in which we live—a culture that increasingly



Fig. 10.1 The interaction between the three major emotion-regulation systems

focuses on individualistic values that promote achievement and independence (Kasser, 2011; Park, Twenge, & Greenfield, 2014). This model of emotion regulation can help when dealing with ethical dilemmas and decision making. For example, if asked to lie to protect somebody, we could feel heightened anxiety and fear about the potential of being "caught" or making a "wrong" decision, and as such would be operating from a threat-base. When operating from this threat-system we are more likely to be focused on self-protection, making it more difficult to think broadly and abstractly about the problem, and rather we might be angry about being put in this position, thus narrowing our perspective. In contrast, lying to protect somebody might lead to significant gain, for example financially, and this can result in a short-term feeling of excitement and this activation of the drive system also narrows perspective, as we focus on pursuing what we want. However, the long-term continued anxiety and fear of being caught may also linger. Therefore, being able to recognize our emotional systems, and how they can influence what we attend to, how we think and behave is important when considering ethical dilemmas and decision making.

One of the problems of being caught between the threat and reward systems is that this then can become the only way of regulating emotions for individuals, and the soothing/affiliative system becomes underdeveloped (Kirby & Gilbert, 2016). The trap of being caught between the drive and threat system in Western cultures is evidenced in the current education system. Despite the increasing evidence highlighting the importance of skills such as understanding emotions, compassion, and emotion regulation, these skills are often not taught explicitly in schools. Rather, the focus of schools is on teaching skills to enhance academic knowledge and achievement resulting in a heavy focus on comparative, competitive, and

achievement-based goals. This is evidenced by Western countries solely emphasizing and valuing student performance as measured by outcomes on standardized testing. Moreover, a problem of an educational approach based on competition and achievements is that students' ethical integrity becomes compromised in the search for better outcomes, as evidenced in the Making Caring Common Project (MCCP) at Harvard University.

The MCCP project authors surveyed 10,000 adolescents across the United States and found that 80% said that "achievement or happiness" (personal success) is their top priority compared to 20% saying "caring for others" is their top priority (Making Caring Common, Harvard, 2014). The study also found youths were three times more likely to agree than disagree with the statement: "my parents are prouder if I get good grades than if I'm a caring community member." Approximately 80% of youths also reported perceiving teachers as prioritizing students' achievements over their caring. Youths also ranked "hard work" above fairness. Importantly, previous research has found that valuing personal success and achievement comes at a price, with half of high school students admitting to cheating on a test and nearly 75% admitting to copying someone else's homework (Josephson Institute, 2012). These findings underscore the significant influence competitive based pressures can have on youth, and how it can impact their ethical decision making. Importantly though, there are now educators, psychologists, parents, and policymakers eager to address childhood social, emotional, and behavioral learning as equally important as academic knowledge, but how to achieve this remains unclear. One potential option to help children and adolescents is to introduce compassionbased programs in the school context (which is already beginning to happen and one we support), given the many benefits associated with compassion and mental health (Kirby, 2016).

Benefits of Compassion

There is now considerable evidence that being the giver and recipient of caring behaviors, particularly compassion, has a range of health benefits (Cozolino, 2007; Mayseless, 2016) and can affect genetic expression (Fredrickson et al., 2013). Compassion training improves general well-being and social relationships (e.g., Jazaieri, et al., 2014; Seppala, Rossomando, & Doty, 2012), with increasing evidence of its effectiveness as a psychotherapy (Leaviss & Uttley, 2015; Kirby, 2016; Kirby & Gilbert, in press). Practicing compassion has an impact on neurophysiology due to neuroplasticity (e.g., Klimecki, Leiberg, Ricard, & Singer, 2014), with a recent study showing that it has significant impacts on heart rate variability (Matos et al., 2016).

With the rise of an awareness of the power of prosocial, compassionate interactions for well-being, and how their opposite (criticism and neglect) is linked to mental distress, there has been a growth of different approaches to help people

cultivate compassion for themselves and others. These approaches include Mindful Self-Compassion (MSC; Neff & Germer, 2013), Compassion Cultivation Training (CCT; Jazaieri et al., 2013), Cognitively-Based Compassion Training (CBCT; Pace et al., 2009), Cultivating Emotional Balance (CEB). Compassion and Loving-Kindness Meditations (e.g., CM & LKM; Hoffmann, Grossman, & Hinton, 2011), and Compassion-Focused Therapy (CFT, Gilbert, 2014; Kirby, 2016). Hybrids are also constantly appearing such as the mindful compassionate living course that combines CFT with more intense mindfulness training or the integration of CFT with therapies such as Acceptance and Commitment Therapy.

To date, there has only been one meta-analysis conducted on compassion-based interventions (Kirby, Tellegen, & Steindl, 2016), which included 23 randomized controlled trials (RCTs) over the last 10 years. Results found significant short-term moderate effect sizes for compassion (d=0.559), self-compassion (d=0.691), and mindfulness (d=0.525). Significant moderate effects were also found for reducing suffering-based outcomes of depression (d=0.656), anxiety (d=0.547), and small to moderate effects for psychological distress (d=0.374). Significant moderate effects were also found for well-being (d=0.540). These results indicate the promising nature of compassion-based approaches in helping with a range of difficulties. The question remains though, do individuals who participate in compassionate-based interventions experience an emerging of ethical importance in their daily life.

Compassion and Ethics

The Dalai Lama has frequently said, "Buddhist ethics can be summed up in two statements: If you are able to help others, then help. If you are not able to help, at least do not harm." (Dalai Lama, 1995). These statements from the Dalai Lama are in alignment with the motivation of compassion, which is to both alleviate and prevent suffering (Gilbert, 2014), and it is arguable that compassion might be the highest ethical principle that guides our behaviors in all domains of life. To support this premise, we would like to emphasize two important points. First, the evolution of mammalian caregiving, which involves hormones such as oxytocin, vasopressin, and the myelinated vagal nerve as part of the ventral parasympathetic system, enables humans to come together, co-regulate each other's emotions and create prosociality. Second, the dynamic balancing of the sympathetic and parasympathetic nervous systems gives rise to variability in heart rate (Heart Rate Variability (HRV); Kirby, Doty, Petrocchi, & Gilbert, 2017). In fact, the autonomic nervous system enables emotion-related action tendencies, which, in the case of compassion, are approach and caregiving. The inhibition of heart rate through the activity of the parasympathetic nervous system has shown to be linked to the orienting response and sustained outward attention, which constitute a core action tendency of compassion (Suess, Porges, Plude, 1994). Consistently, compassion-evoking

stimuli (videos of other's suffering) have shown to generate vagally mediated heart rate deceleration in children (Eisenberg et al., 1998) and in adults, whose self-reports of sympathy and compassion were positively related to heart rate deceleration (Eisenberg et al., 1991). Moreover, children with higher heart rate deceleration during evocative films showed increased subsequent compassionate behavior (Eisenberg et al., 1989). Interestingly, children with higher baseline HRV were rated by teachers and parents as more helpful and more able to regulate their emotions than those with lower HRV (Eisenberg et al., 1996) and showed increased self-reports of sympathy, both dispositionally and in response to distress-inducing films (Fabes, Eisenberg, & Eisenbud, 1993). This suggests that tonic HRV might represent the physiological signature of a trait-like compassionate responding, indicating that perhaps in some way we are "hard-wired" for the compassionate motive to be our in-built ethical compass.

When considering compassion as a guiding ethic, it is important to note the *motive* component. For example, the action of not speeding when driving might be due to an underlying motive of wanting to avoid harm to self by not getting a speeding ticket—put simply, avoiding punishment/harm to self. Harvey (2000) would suggest that this kind of action is done for prudential reasons, "*I do not want a fine or go to jail*," and thus is not really done from a compassionate ethical perspective or motive. From an evolutionary perspective, this action can be considered as stemming from the threat-system, which is focused on self-protection, and has a different physiological pattern compared to caring/compassionate motives (Gilbert, 2014). In contrast, if the motive was one of compassion, not speeding when driving is part of being a good citizen on the road and attempting to prevent harm due to caring for others well-being.

Buddhist Ethics and Compassion Ethics are an important component in Buddhist teaching and the foundation of the Buddha's Eightfold Path is ethics or a wholesome lifestyle. The Eightfold Path has specific steps suggested for the alleviation of suffering for ourselves and others. Traditionally, the eight practices are presented in the following order: (1) right view, (2) right resolve, (3) right speech, (4) right action, (5) right livelihood, (6) right effort, (7) right mindfulness, and (8) right concentration (Bodhi, 2000). The Eightfold Path is characterized by a sense of ethical direction, determined by the cultivation of the wholesome and helpful, and relinquishment of the unwholesome and unhelpful (Bodhi, 2000). Ricard (2015) describes it this way: "In Buddhism, an act is essentially unethical if its aim is to cause suffering and ethical if it is meant to bring genuine well-being to others." (p. 239). The Eightfold Path is sometimes considered in three categories of (1) moral virtue (right speech, right action, right livelihood); (2) meditation (right effort, right mindfulness, right concentration); and (3) insight or wisdom (right view, right resolve). It offers an ethical framework in which to live and interact with others and the world, aimed at promoting a reduction in suffering and an increase in well-being, but also at a deeper level it may lead to liberation, Nirvana, or complete release from dukkha. Compassion is the heart of the Eightfold Path and provides the guidance toward ethical action, or more accurately, an ethical way of being.

Whereas the ethical intention of Buddhist practice is to cultivate a way of being, that is, a life that feels good or consistent with one's values, Aristotle takes a different view. For Aristotle, the primary purpose for ethics is to help guide human beings toward living a good life. This is, of course, distinct from living a life that *feels* good. Rather, the good life, according to Aristotle, is one in which the activities of living are performed not simply for some sort of specific outcome, such as wealth or power, but rather the activity is performed because of the inherent worth, value or quality of the activity itself (1999). We choose to be a good friend, not because the friendship will benefit us with some sort of payoff, but because the activities of friendship are worthwhile in and of themselves. Aristotelian ethics also promotes the view of teleology, which attempts to describe things in terms of apparent purpose, principle, or goal (Fowers, 2015a). This can be further divided into *extrinsic* purpose—a purpose imposed by humans, and *intrinsic* purpose which are irrespective of human use or opinion. For example, Aristotle claimed that an acorn's intrinsic telos is to become a fully grown oak tree (Fowers, 2015a).

Aristotle also argued that there is a hierarchy of activities and goods. For example, he considered activities that were a means to an end, and the end was possessed or experienced by an individual only (for example, money or possessions), as lower-order activities than those activities that were of value in and of themselves, and that value is shared (for example, friendship or teamwork). These ethical views proposed by Aristotle reflect an eudemonic way of being, which Plato and Socrates also wrote. An eudemonic view equates happiness with the human ability to pursue complex goals, which are meaningful to society. This contrasts with a hedonic view, which equates happiness with pleasure, comfort, and enjoyment (Delle Fave, Massimini, & Bassi, 2010). Often it seems in today's modern world that the pursuit of a hedonic lifestyle has become the imperative, and this is reflected in Western cultures desire to pursue drive-based goals based on individualistic achievements (Kasser, 2011).

Young people in Western cultures are increasingly endorsing individualistic values (Park, Twenge, & Greenfield, 2014). Although the increase in individualism may be the necessary result of a competitive market economy, this focus may diminish collectivistic and community values. For example, researchers have found that recent generations are lower in empathy for others (Konrath, O'Brien, & Hsing, 2011) and concern for others (Twenge, Campbell, & Freeman, 2012), which may negatively impact societal ties and mental health (Park et al., 2014). Moreover, other correlational studies have found that a strong focus on goals like money and status (compared to community feeling) is associated with being less warm and more controlling toward one's children (Kasser, Ryan, Zax, & Sameroff, 1995). These results suggest the more an individual cares about self-interested and materialistic goals, the less likely the person is to prioritize the values that help facilitate the well-being of current and future children (Kasser, 2011).

In a large study by Kasser (2011) that examined cultural values and future well-being, data were collected from 20 wealthy nations (e.g., the United States, Australia, the United Kingdom, Germany) on the indices of childhood well-being, the amount of maternity leave available, and country CO₂ emissions (data collected from archival data and multiple sources). Specifically, Kasser (2011) was interested in whether countries would perform better if they prioritized egalitarian-based values (i.e., that promote cooperation and a sense that everyone is equal and should be cared for (i.e., eudemonic)) over hierarchy-based values (i.e., that validate the unequal distribution of power and resources often found in cultures) and harmony values (i.e., that promote an acceptance and appreciation of the world as it is) over mastery values (i.e., hedonic or those that attempt to actively change the world to fit one's own self-interests). What he found was the more a nation prioritized egalitarianism and harmony-based values over hierarchy and mastery values, the higher children's well-being was in the nation, the more generous the national laws were regarding maternal leave, and the less CO₂ the nation emitted (Kasser, 2011).

Contemporary philosopher Thomas Metzinger suggests that we need to consider an ethics of consciousness (2009). This becomes even more important with the advancement of artificial intelligence. He postulated there are three desirable states of consciousness: (1) it should minimize the suffering in humans and all other beings capable of suffering; (2) it should ideally possess an epistemic potential (that is, it should have a component of insight and expanding knowledge); and (3) it should have behavioral consequences that increase the probability of the occurrence of future valuable types of experience (2009). Metzinger concedes that how to achieve this is unclear, however, some possibilities include meditation in high school, and familiarizing people with the brain-body connection. Metzinger (2009) emphasizes that the brain is part of the body, and dualistic philosophy has had negative impacts, as disconnecting the brain from our bodies creates unrealistic and potentially dangerous ideologies. Rather, Metzinger (2009) suggests teaching people from an early age about how our nervous systems work will help people to take responsibility for how their own body-brain works, which will enable them to show empathy and compassion toward others as they mature. These sentiments of Metzinger's (2009) are shared by Compassion Focused Therapy (Gilbert, 2014; Kirby & Gilbert, 2016) where the aim is to teach about the evolved functions of our brains and body so we can better relate to ourselves and to others.

Compassion and Ethical Conflict

Importantly, despite the advantages of holding compassion as a guiding ethic it does not resolve and provide answers to all ethical dilemmas. Ekman (2014) postulates that we should be more precise when referring to the target of compassion, and whether it is a familial (e.g., family member, offspring, sibling), a familiar (e.g., friend, neighbor, colleague), a stranger (e.g., somebody you do not know)—which

could also be further assessed in terms of in- and out-group variations (e.g., gender, race, ethnicity), or any sentient being (e.g., any living being, pet, animal). Indeed, research has found it is easier to be compassionate to those whom we like and are part of our group than those who are not (Gilbert, 2014). For example, take the notion of heroic compassion, or as Paul Ekman refers to it, non-referential compassion (Ekman & Ekman, 2013). In this form of compassion, the idea is that you extend compassion to all despite potential consequences to oneself.

Franco, Blau, and Zimbardo (2011) define heroism as:

A social activity: (a) in service to others in need—be it a person, group, or community, or in defense of socially sanctioned ideals, or new social standard; (b) engaged in voluntarily (even in military contexts, heroism remains an act that goes beyond actions required by military duty); (c) with recognition of possible risks/costs, (i.e., not entered into blindly or blithely, recalling the 1913 Webster's definition that stated, 'not from ignorance or inconsiderate levity'); (d) in which the actor is willing to accept anticipated sacrifice; and (e) without external gain anticipated at the time of the act. (2011, p. 101)

A common example that comes to mind when considering heroic compassion is that of the families who took Jews into their homes during World War II. Kristin Monroe (1996) published a book on heroic compassion, which was made up of individual interviews with people who had risked their own life to save others including many Germans who took in Jews during the Nazi régime. What was poignant and most powerful about this book was that the only unifying aspect of all her interviewees was a feeling that they simply had to do what they did, it was not a choice. This suggests that for these people, risking their life was a necessary response to the perceived threat toward others. It sounds as though these people did not experience "out group" biases and in fact had almost familial compassion toward those people they rescued, often with great risk to their own livelihood. Perceiving the target of compassion to be like us, irrespective of external differences, has been called a universal orientation, one that is likely to precede a globally compassionate approach.

Although the example of German families taking Jewish people into their homes to protect them during World War II is unquestionably brave, one must also consider all members in this situation: (1) the Jewish family; (2) the German parents who took the Jewish family in; and (3) the children of the German parents. If we direct compassion to the Jewish family, one could consider this as heroic compassion. However, if we direct our compassion to the children of the German parents would it still be compassion? Could a potentially inadvertent consequence of the actions of the German parents to let the Jewish people into their homes potentially lead to a devastating outcome for these children? If German parents did not let Jewish people into their homes because of the risk of harm to their own children would that be considered a more "selfish" action? Or would it still constitute compassionate action for their children? When one considers all members in this very difficult ethical dilemma it becomes clear that although compassion can help guide us in our ethical choices, it does not lead to easy, simple, correct/incorrect answers or ways of being (see Jennings & DeMauro and Monteiro & Musten in this book).

What is important, however, is that compassion can help ground us, and it can help direct our attention from being caught up in threat, where we have an increased likelihood of acting out of fear and anger. And it can help activate the physiological systems within our body that help provide calmness and permits empathic perspective taking, empathy, and mentalizing to occur. In doing so, compassion interventions perhaps offer hope to help ethics emerge.

Compassion-Based Interventions

Over the last 10 years, there has been an increase in the number of compassionbased interventions with many options available for individuals. A review by Kirby (2016) on compassion-based interventions found at least six current empirically supported interventions that focus on the cultivation of compassion: Compassion-Focused Therapy (CFT; Gilbert, 2014), Mindful Self-Compassion (Neff & Germer, 2013), Compassion Cultivation Training (Jazaieri et al., 2013), Cognitively Based Compassion Training (Pace et al., 2009), Cultivating Emotional Balance, and Compassion and Loving-Kindness Meditations (e.g., Hoffmann, Grossman, & Hinton, 2011). To date, all six forms of intervention have been subject to the "gold standard" evaluations of randomized controlled trials (RCTs); however, only CFT and Compassion and Loving-Kindness Meditations have been evaluated in a systematic review (Hoffmann et al., 2011; Leaviss & Uttley, 2015). Kirby and Gilbert (2016), in an effort to understand the current state of compassion-based interventions, created a table that provides a brief description of some of the elements that are similar and different across some of these compassion-based approaches, which can be seen in Table 10.1.

Importantly, when viewing the elements in each of the compassion-based interventions it becomes clear that many compassion-training programs include teachings and instruction on ethics, specifically concerning the ethic of compassion. Although the psychoeducation, strategies, and exercises across the interventions are presented within a primarily secular framework, many of the key concepts and core practices are drawn from Buddhist traditions, and all programs were developed with consultation or advice from Buddhist teachers or scholars. This inclusion of ethical views, specifically the ethical view of compassion, in compassion-based interventions is an important distinction compared to mindfulness-based interventions. In the literature (e.g., Monteiro, Musten, & Compson, 2015), it has been discussed that the inclusion of overt reference to ethics in mindfulness training is often considered as if it is imposing Buddhist values. A key feature of scientifically driven contemporary psychology is for its practices and strategies to be value-free (Monteiro, 2016). In addition, many contemporary mindfulness-based programs do not overtly address the importance of ethics within their participants' mindfulness practice. Many therapists and program leaders feel that to discuss the ethics of their patients or program participants' behaviors would somehow be an imposition of values (Monteiro, 2016). Thus, current mindfulness-based interventions have been criticized as being

Common features

- Designed to be secular in approach, utilizing western psychology science and therapies but also informed, to greater or lesser degrees by contemplative traditions.
- Attention and mindfulness-based training components.

Define what compassion is, with each intervention having a different definition.

- Compassion-focused visualizations and meditation practices.
- Some form of psychoeducation where rationale provided for intervention.
 - Active experiential components.
- Focus on intention or values.
- Homework exercises and regular practice.

	CEB	Compassion more focused
	CCT	Based on definition of
Specific features	CBCT	Based primarily on
	MSC	Based primarily on Neff's
	CFT	Compassion definition includes

- Based primarily on Neff's oipolar constructs of: (1) udgment; (2) common self-compassion using conceptualization of Kindness vs selfand (2), alleviation and prevention, two psychologies: (1) engagement Compassion definition includes Psychoeducation of evolved each with 6 trainable competencies.
- self-experiences of life approaches including Informed by various over-identifying. threat/protection drive/acquisition, and soothing /contentment and the Evolved function of emotions of
 - difficulties, Insight processes and emotional balance. links to (neuro)physiological (phenotypic) versions of self arising from gene and social The concept of multiple context.
- Examines compassion Based primarily on equanimity, lovingas aspirational and Buddhist lojong mmeasurables, Focus on four tradition. active.

intentional, and

motivation.

Concentration and directive

nvolving four constructs

compassion by Jinpa cognitive, affective, Understanding emotional

patterns.

Recognizing emotions.

oractice meditations.

Recognizing emotions in

session with a meditation

Begin and end each

humanity vs isolation; (3)

"tricky mind" due to old and new

brain interactions.

mindfulness vs

practice, which includes

others (face, verbal) to

Yoga and movement

practices.

promote empathy.

on others as a prosociality.

breath focus meditation. kindness, appreciative oy, and compassion.

contemplation of oving-kindness,

Teaches active

- Inclusion of tong-len. Primary focus is on
- cultivate compassion and meditative practices to
- appraisals, and cognitions associated with affective sensations, triggers,

oving-kindness towards

self and others.

loved ones, strangers,

and enemies.

compassion towards

empathy and

other mindfulness-based

interventions such as

Meditation, CFT, and

Knowledge of functions,

continued
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CFT				
	7	CBCT	LJJ	CER
	,	CBCI		CEB
•	Inclusion of the self-	Integrates cognitive		
as an inner organizing motivation and self-identity process made up	exercise, based on	THE VEHIOUS		
	self-compassion			
	definition.			
Compassion for others, open to	Breaks meditations into			
compassion from others,	core, other, and informal			
self-compassion.	practices.			
• Developing compassionate	Focus on savoring and			
imagery and sense of self using	positive psychology.			
acting techniques of becoming and	Includes letter-writing.			
then "acting from" constructed	Working with backdraft			
self-role.	problems with compassion			
Developing and using the	blocks.			
compassionate mind to address				
difficulties such as shame				
self-criticism and relational				
conflicts.				
Addressing fears block and				
resistances to positive affect and				
compassion.				
Letter-writing exercises.				
Breath, postural training, with				
"thinking emotional tones."				
Expecting and addressing fears				
blocks and resistances to positive				
and affiliative emotions and the				
three orientations of compassion.				
Administered both individually				
and in groups.				

Thomas America ch.	T. C.	Follows of old of one	Pollower of a second	Tolinia December
The apy Approach.		Tonoms eight-steps.	Tonows state by:	Trammig Hogiann
 Individualized and group 	Components:	1. Developing	 Settling and focusing 	Components:
interventions based on client's	1. Introduction and review	attention and	the mind	1. Concentration training
presentation and case	of self-compassion	stability of Mind	1. Loving-kindness and	2. Mindfulness training
conceptualization	2. Mindfulness training	2. The nature of	compassion for a	3. Promotion of empathy
2. Compassionate Mind Training	3. Application of	mental experience	loved one	
an 8-week intervention is also	self-compassion to	3. Developing	3a. Compassion for self	4. Yoga and other
available	daily life	self-compassion	3b. Loving-kindness for	movement practices
	4. Developing a	4. Developing	oneself	5. Conceptual discussion
	compassionate inner	equanimity for	4. Embracing shared	including a focus on
	voice	others	common humanity	values, life meaning
	5. Living in accordance	5. Developing	and developing	6. Knowledge of functions,
	with values	appreciation and	appreciate of others	sensations, triggers,
	6. Dealing with difficult	gratitude for others	5. Cultivating	automatic appraisals,
	emotions	6. Developing	compassion for others	and cognitions
	7. Dealing with	affection and	6. Active compassion	associated with specific
	challenging	empathy	practice (tong-len) and	affective states (e.g.,
	interpersonal	7. Realizing, wishing	integrated daily	anger, fear, sadness)
	relationships	and aspirational	compassion cultivation	7. Recognizing one's own
	8. Relating to positive	compassion	practice	emotions
	aspects of oneself and	8. Realizing Active		8. Understanding one's
	one's life with	Compassion for		own emotional patterns
	appreciation	others		9. Recognizing emotion in
	9. A mid-program 4-h			others (face, verbal) to
	retreat often included			promote empathy
Initial Development:	Initial Development:	Initial Development:	Initial Development:	Initial Development:
Complex clinical problems of high	The general population	University students and	The general population to	 The general population to
sname and self-criticism.	who struggle with	adolescents at risk to	neip with emotion	reduce destructive
	self-criticism.	develop emotional	regulation and cultivate	enactment of emotions and
ī	i	resilience.	compassion.	enhance prosocial responses.
Source:	Source:	Source:	Source:	Source:
• Gilbert (2014)	Neff and Germer (2013)	Ozawa-de Silva, B & Dodger I greatle B	• Jazaieri et al. (2014)	• Kemeny, M.
		Dodson-Lavelle, B (2011)		et al., (2012)
		(***)		

more of a bare attention training (Farias & Wikholm, 2015). Monteiro et al. (2015) pointed out the differences between the contemporary and traditional approaches to mindfulness, and highlighted the concerns expressed in Buddhist communities. The main concerns expressed were: (1) the practice of mindfulness has been decontextualized from the Eightfold Path; (2) the scientific reductionist approach to defining mindfulness may have devolved to it being, for the most part, just bare attention and does not contain all the elements of what Buddhists call right mindfulness; and (3) that mindfulness as it is taught in contemporary settings is most often devoid of any explicit reference to ethics though implicit transmission of ethics is presumed.

Although compassion-based interventions focus on the ethic of compassion in their intervention approaches, and these interventions have been found to be effective in a meta-analysis (Kirby, Tellegen, & Steindl, 2016), there is presently no data from compassion-based interventions that have directly examined the emergence of ethics as an outcome variable. Rather, evaluation studies of compassion-based interventions are currently focused on the alleviation of suffering-based outcomes, such as depression and anxiety, most commonly through using self-report measures. Despite this, some interventions have tried to assess the impact of compassion training on helping behavior. For example, Leiberg et al. (2011) examined the impact of a 6-h workshop based on a compassion meditation. The major focus of this study was to determine whether compassion training increased prosocial behavior toward strangers, based on responses in a computerized game called the "Zurich Prosocial Game." Results found that compassion training significantly increased helping behavior toward strangers—to date the only study to directly assess behavior as an outcome.

In contrast to this finding, a recent RCT of compassion training on charitable donation giving found that compassion meditation did not significantly increase donations (Ashar et al., 2016). The study randomized 58 participants to either a smartphone-based compassion meditation program, or to a placebo oxytocin condition, or a Familiarity intervention (to control for expectancy effects and demand characteristics). In the compassion meditation condition, participants were instructed to listen to a 20-min guided meditation daily. Overall, participants donated an average of \$21.57 per donation trial, out of \$100 maximum. In the compassion meditation and oxytocin conditions, participants' donations did not change over the course of the intervention, however the Familiarity participants' donations decreased. The authors provided some possible reasons for this outcome, including, participants may tend to donate less over time to the same recipients, or possibly that compassion meditation directly targets thoughts and feelings and not overt behavior (Ashar et al., 2016). It could also be that the sample size did not have adequate power to detect a small effect.

Overall, what these findings indicate is current evaluations of compassion-based interventions are focused on alleviation of suffering, and some are also moving toward examining the impact on prosociality. To better assess the emergence of ethics as an outcome from compassion training, a different study design may potentially be useful. For example, the use of diary entries or group discussions pertaining to ethical dilemmas could begin to shed light on whether compassion

interventions increase ethical thinking and behavior. In addition, researchers are now developing questionnaires that aim to assess whether individuals have not only experienced an increased motivation to be compassionate, but also whether they have engaged in behavioral acts (Steindl et al., 2016). Given the theoretical notion that compassion is the foundation for morality and ethics (e.g., Halifax, 2012), future research may benefit from examining the relationship between moral reasoning or ethical decision making and compassion training. Importantly, evaluation work in mindfulness is beginning to examine this relationship, with Shapiro, Jazaieri, and Goldin (2012) finding that the Mindfulness-Based Stress Reduction (MSBR) program led to improvement in moral reasons and ethical decision making 2 months post-intervention.

Future of Compassion and Ethics Research

In terms of future research, examining physiological markers such as Heart Rate Variability may be one of the key elements in understanding the emergence of ethical thinking and behavior. For example, an innovative study by Leon, Hernandez, Rodriguez, and Vila (2008) found that HRV modulates perception of other-blame, reducing anger. Specifically, 84 college participants were asked to read a story that was constructed in such a way to be emotionally meaningful and involve a negative consequence for the reader. The story involved the reader being dismissed from his/ her part-time job due to the actions of a colleague. Participants were randomized to the story either having an intentional or non-intentional ending, where a colleague is deliberately or not-deliberately responsible for the job loss. Participants are measured on a range of variables including the primary measure of HRV. Researchers found that in the situations of intentionality, individuals with higher HRV made less extreme evaluation of the offender's blame, versus those with lower HRV, thus leading to a reduction in anger reaction. These results suggest that HRV is a direct index of cognitive rather than emotional regulation. These results provide some preliminary evidence indicating how the physiological measure of HRV can influence how we feel and think about a situation, which can directly impact our decision making in ethical dilemmas.

Kirby, Doty, Perocchi, and Gilbert (2016) have recently suggested that HRV is the key primary outcome that needs to be measured in compassion training as it is a direct measure of physiology. Moving beyond the use of self-report, which is of limited reliability, or the more complex and expensive fMRI, HRV is relatively easy to measure and offers windows to a number of important physiological systems, including the frontal cortex and people's relative state of psychological flexibility. The value of using HRV both as a process/state and outcome measure in compassion research is linked to three major domains. First, that psychopathology (depression, anxiety, paranoia) and underlying processes such as self-criticism, negative rumination, shame, and worry are linked to lower levels of HRV (Beevers et al., 2011; Brosschot et al., 2007; Rockliff, Gilbert, McEwan, Lightman, & Glover, 2008). Second, that compassion is correlated with HRV

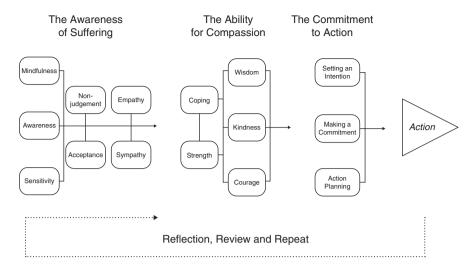


Fig. 10.2 The motivational flow from mindfulness to compassionate action

(Svendsen et al., 2016). Third, compassion-based practices can directly increase HRV and potentially other biological, physiological, and neurophysiological measures such as cortisol and blood inflammation (Rockliff et al., 2008; Kok et al., 2013; Petrocchi, Ottaviani, & Couyoumdjian, 2016). These results perhaps highlight how the precursors of compassion are, in a way, "hard-wired" into our physiology, and if we can impact our physiology we increase our ability to be more compassionate and therefore more likely to act ethically. Thus, future research needs to measure individuals' levels of HRV in compassion-based interventions, as well as how this impacts the emergence of ethics, potentially through how they respond to ethical dilemmas. This would shed further light on the interconnection between compassion, ethics, and physiology.

A final potential way to promote the ethic of compassion in training is to have a pragmatic flow diagram on how the flow of mindfulness to compassionate action may look. We have proposed such a model in Fig. 10.2, outlining how the awareness of suffering can lead to the ability for compassion, which can impact on committed action. This model is just a preliminary conceptualization that requires testing to determine whether a pragmatic flow would be helpful theoretically, for researchers, and for individuals engaging in compassion training to help improve ethical thinking and behavior.

Conclusion

The focus of this chapter was to suggest that compassion may be our highest ethic. We discussed how compassion can be a guiding motivation to address life difficulties, and how compassion is understood in terms of evolutionary processes and

physiology. Based on the recent research conducted in compassion science, we put forward the view that compassion holds potential as being our "hard-wired" ethical compass. However, our modern-day Western cultural values diminish its impact. Compassion-based interventions hold promise to help increase compassion, and potentially, influence our physiology, so we can begin to become more ethical beings.

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