# Preface

## What Is This Book About?

Compassion is a core value in healthcare. A recent survey shows that 85% of patients and 91% of doctors value compassion, making it the most important principle in healthcare.[1] However, terms like “compassion,” “empathy,” and “sympathy” have been used interchangeably in common parlance, and their definitions vary in the literature. This semantic and conceptual confusion has important implications for clinical practice, medical education, and research. In addition, while medical schools offer courses on communication skills, patient–physician relationships, and social determinants of health, compassion is inconsistently taught, valued, and measured,[2] partly because of the lack of a standard curriculum that covers the full gamut of this construct, from conceptual to experiential.

This book is designed as a short, “all-in-one” introductory text that covers the full spectrum of compassion, from the evolutional, biological, behavioural, and psychological, to the social, philosophical, and spiritual. Written with busy trainees, clinicians, and educators in mind, it aims to address the following questions concisely: What is compassion? Is it an emotion, a motivation, or is it multidimensional? Is it innate or a trainable skill? What do different scientific disciplines, including neuroscience, tell us about compassion? Why is “compassion fatigue” a misnomer? What are the obstacles to compassion? Why are burnout, moral suffering, and bullying so rampant in healthcare? Why does compassion decrease during medical training? And, finally, what does it take to cultivate compassion? It is my hope that by providing readers with a solid conceptual framework, the materials presented here will inspire, reinforce, and integrate with the experiential component of compassion that requires diligent cultivation, training, and practice.

# Why Did I Write This Book?

I am a physician, scientist, and educator. I work in a tertiary/quaternary pediatric hospital and am a professor in a major academic centre in North America. I once thought that I lived a very fulfilling life: providing the best care to children and their families through direct patient work, generating exciting new medical knowledge through research, and nurturing new generations of physicians and scientists through teaching, as well as serving my colleagues, hospital, university, and the larger healthcare system through various leadership positions.

With my drive, determination, and work ethic, I ascended the academic ladder rapidly, being promoted from assistant, to associate, and then to full professor in fewer than 10 years. I was named a highly coveted endowed Chair at the relatively young age of 40. When I was 45, I became the Chief of Ophthalmology in my hospital and the Vice Chair of Research in my university department. I held multiple prestigious research grants simultaneously for many years, published extensively in top journals in my field, and directed a large laboratory that hired many scientists, engineers, technicians, and students. I travelled around the world on a regular basis, giving keynote speeches and named lectureships, along with being a visiting professor. I received numerous accolades for my research and teaching endeavours. I felt that I was truly blessed because I would not have accomplished all these without the unyielding support of a loving husband and two adorable sons. Many would say I had reached the pinnacle of success as a physician-scientist while at the same time achieving a very fine work–life balance.

But these accomplishments were not enough. I strived to advance upward by pursuing a degree in Master of Business Administration while managing a full workload. Then, something completely unexpected happened. I developed a hearing loss in one ear, 4 years ago, at age 48. The worst part of it was a constant, 24/7, non-stop ringing in my ear. I could not rest, I could not sleep, I could not have a moment of peace and quiet. I was treated with steroid injections into my ear. I was also put on oral steroids. Not only did they not help, I developed suicidal thoughts which frightened me to the core. When all Western treatment options were exhausted, my doctor covertly told me that he did not want to see me anymore. I felt abandoned, desperate, and hopeless inside. But, on the outside, I put on a brave face and continued to

carry out all of my duties, pretending that I could endure all of these challenges with my usual determination and perseverance.

As I suffered deeply inside, I began to see clearly all the sufferings around me. I realized that, despite many successes, our satisfaction seems to be short-lived—very soon it diminishes, and we find ourselves wanting more. At times, we become unhappy because we don't get what we want, or we get what we don't want, or we worry about things not going our way. As I looked around, I felt deeply the stress that my co-workers experience every day from an excessive workload, the agony that we face when making complex and difficult decisions, the moral distress that we witness in the workplace, the tugging at our hearts from our family and relationships as we juggle multiple competing demands, and, ultimately, the suffering that we all have to confront through sickness, old age, and the inevitable demise of our loved ones and eventually our own self.

I started to see more and more vividly the cycles of stress and anxiety that we all encounter, as well as how my own reactivity contributes to these cycles of negativity that affect not only myself but also everyone around me. I began to realize clearly that our well-being does not come from achieving, acquiring, and accumulating. While there is nothing inherently wrong with the rewards that come from hard work, the pitfalls of success come when maintaining these privileges—in my case, a successful medical practice, prestigious academic titles and honours, an esteemed social status, big house, nice car, exotic vacations—become an obligation. At a certain point in time, the pursuit of material possessions, pleasures, praise, and recognition makes life feel hollow. Without awareness and the courage to look deeply or make changes, we may work harder and accumulate more only to find that the happiness and deep fulfilment that we long for remain elusive.

I began to realize that true happiness can come only by examining what's inside, by investigating the relationship between the external world and our inner self, and by changing our habitual patterns in response to our thoughts, feelings, and emotions. After a very long period of reflection—the dark night of my soul[1]—I decided to pursue a different path and do the unthinkable. I stepped down from all the leadership positions before completing my terms. I closed my laboratory. I turned part-time. However, my heart was torn because all of these radical changes were incompatible with my deeply ingrained ambition, competitiveness, and perfectionism. Going through these changes felt like a career suicide, an existential crisis, a mini-death. I kept

thinking: What will people think of me? Am I disappointing my hospital staff? How could I be so irresponsible by abandoning many long-time employees whose livelihoods depend on me? Will I ever be trusted again? Am I setting a bad example for my kids and trainees by being a “quitter”? Are the many years of training and the experiences that I have accumulated to finally become a highly specialized expert going to waste? What will be the financial implications? Confronting these questions was painful, heart-rending, and frightening. Unknown to me, my identity, self-worth, and sense of purpose had been wrapped up completely with my roles, titles, and external validation. I asked myself: Who am I *really*, and what should I do next? I knew deep inside that I must commit to my decision no matter how raw, excruciating, and harrowing the process was.

I began by looking at what I enjoyed most. I realized that what has brought me the most joy was meeting people, listening to them, and serving them in whatever way I could. I also recognized that I have been increasingly drawn to the spiritual needs of the dying, having witnessed and been immersed in some truly life-changing, genuinely human, and amazingly enriching experiences while caring for my dying father, mother-in-law, and mentors. At the same time, I have been practising mindfulness for several years, which has helped me to be stronger, calmer, and more opened to new perspectives. I wanted to delve deeper into its roots that originate in Buddhist traditions. Out of these considerations, I resolved to pursue chaplaincy training with Roshi Joan Halifax,[2] so that I could hone my skills to serve others and explore how to care for the dying while at the same time deepen my spiritual practice.

Chaplaincy training has been a deeply healing and transformative experience. I now realize that I must touch deeply into my own pain and sorrow so that I can look clearly into the underlying causes of the inherent unsatisfactoriness of our conventional lives. From a visceral appreciation of the universality of suffering, a deep motivation was aroused in me: to lead an awakened life with integrity, courage, and wholehearted practice, to alleviate the miseries of all beings, and to touch the true nature of reality. Learning to embrace not knowing, to bear witness to the joys and pain of life, and to discern what is the most skilful action at each moment has been challenging and yet, paradoxically, deeply grounding and nourishing. I can now see acutely that my earlier notion of service, though noble and well-meant, was based on many previously hidden, naïve, and incomplete assumptions and orientations. It was based on the concept of “fixing” what is broken and

“helping” what is weak from a position of being better and stronger, rather than coming from a deep inner place of humility to serve life as whole.[3] I also notice, despite the best intention to serve, how quickly, easily, and furtively my ego slips in for its own gratification.

Chaplaincy training has brought me to many unanticipated, uncharted, yet remarkable territories. Working as a hospice volunteer in the community, I came to know a “dying” young woman with a malignant brain tumour. She had been given less than a year but continued to live for another decade. I feel that I have come full circle. As a neuro-ophthalmologist, I see patients with brain tumours regularly, monitoring their visual and neurologic functions. I have rarely paused, if ever, to imagine what living a life with multiple handicaps, uncertainties, and imminent threats of death feels like. At the same time, the strength, resilience, and wisdom this young woman revealed have given me a new appreciation of the mystery and sacredness of living and dying.

Through serendipity, I have also become a volunteer in a prison, working with inmates on a weekly, one-on-one basis. It is truly an eye-opening experience beyond my wildest imagination. I have become a witness to the most unimaginable, horrendous, and unbearably painful life circumstances that these men have endured from a very young age. I am astonished to notice a common theme among these men: extreme poverty, discrimination, physical and sexual abuses, alcohol and drug addictions, mental illnesses, psychological traumas, and violence, as well as brain and other physical injuries. Moreover, these adverse conditions seem to span generations. I also see how these men are forgotten by society, incarcerated in prison with its culture of subordination, without freedom, without having their simple needs or basic human rights met. They constantly continue to face physical and sexual violence, cruelty, injustice, loneliness, fear, and worse. Their experiences have made me realize that I have lived a privileged life, cocooned and ignorant of how different it could have been. How could I not bring my presence, my willingness to listen, and my companionship to these men who have never had the opportunities that I have taken for granted?

With these poignant exposures to life’s adversity, I realized that I need to cultivate a deeper compassion and skilful means before I can truly serve others. Therefore, I decided to take a deep dive to study compassion in earnest for my chaplaincy thesis, combining my longstanding interests in psychology, biology, neuroscience, and social science with my curiosity to

explore Buddhist teachings in greater depth. When I first encountered the ideal of *bodhisattvas*—enlightened beings who are motivated to end all sufferings until all are liberated—I was completely enthralled. It was as if the ordeal of my hearing loss (which has since resolved) had cracked open my heart to hear the cries of the world, dissolving my personal boundary beyond time and space. When I first came across the idea of the "great compassion"—a non-referential, boundless compassion that becomes one's *raison d'être* not only to practise wholeheartedly, but also to pursue intellectual understanding to penetrate into the ultimate truth—I was moved to tears. I now realize that my interests in the sciences and my love for reading and writing, as well as my zeal for teaching, are not necessarily self-centered pursuits that hinder the path to awakening. On the contrary, I can realign my interests with a deep aspiration and intention to benefit all others. The results of this recognition and exploration on the sciences of compassion led to the first half of the present book.

As I was nearing the completion of the thesis, I began to understand a main reason why I decided to make such a drastic change in my career: my disillusionment with the healthcare system. As a leader, I envisioned and attempted to build a more compassionate culture in the workplace where everyone—doctors, nurses, staff, administrators, and all others—comes together not only to serve patients and their families, but also one another, so that everyone can live a purposeful, fulfilling, and authentic life. Although there were some small successes, I was also met with much skepticism, cynicism, or silent acquiescence to the status quo. I pondered deeply inside and explored why I hit many roadblocks by reaching out to colleagues, other healthcare professionals, and caregivers to learn from their experiences. I researched and investigated why there is so much distress, burnout, and suffering in the healthcare world. I now have a fuller understanding of the hurdles that caregivers face, as well as some skilful ways to cultivate a compassionate and flourishing life, which I discuss in the second half of this book.

It is with great joy that I share this book with you. Whether you are a medical student, physician-in-training, practising doctor, nurse, social worker, therapist, chaplain, hospice worker, caregiver, volunteer, or someone who wants to live a compassionate and flourishing life, I sincerely hope that this book will encourage you to cultivate compassion as a skilful means to serve others and look more deeply into your own life. Individually and

collectively, we can transform healthcare into a kinder, more caring system, as well as build a gentler, more just society that is so needed in this burning world.

## References


1. Patients favor compassion, clinician empathy over low doc costs. https://patientengagementhit.com/news/patients-favor-compassion-clinician-empathy-over-low-d costs
2. Lown BA, Chou CL, Clark WD, et al. Caring attitudes in medical education: Perceptions of dea curriculum leaders. *J Gen Intern Med.* 2007;22(11):1514–1522.


---

[1] This phrase originates from a poem by St. John of the Cross (1542–1591), a Spanish Carmelite monk and mystic, whose best known work *Noche Oscura del Alma* is translated as “The Dark Night of the Soul.”

[2] The term “Roshi” is a respectful honorific to a precious teacher or a master in the Zen tradition.

[3] I learned the differences between helping, fixing, and serving from Dr. Rachel Naomi Remen who wrote: “Helping, fixing, and serving represent three different ways of seeing life. When you help, you see life as weak. When you fix, you see life as broken. When you serve, you see life as whole. Fixing and helping may be the work of the ego, and service the work of the soul” (*Shambhala Sun*, September 1999).

# 1

# What Are Empathy and Compassion? A Western Perspective

## Introduction

As a young aspiring student, I wrote in my medical school application that I wanted to become a doctor in order to help others through science and compassion. When I went into medical school in the early 1990s, I soon became immersed in a curriculum that placed strong emphasis on scientific and technical excellence. I studied the latest advances in basic and clinical sciences, the different diseases and their processes, as well as the myriad of tests, drugs, and procedures. Very little, if any, curriculum time was dedicated to the cultivation of compassion—in fact, I can't recall a single instance when the word "compassion" was mentioned.

While compassion is an important quality of a good doctor, there seems to be an implicit assumption that we cannot develop compassion in the same way that we acquire technical knowledge and skills. There also seems to be a widespread belief that compassion is soft and incompatible with science or that you can be compassionate at your own peril because compassion is limited, heavy, and fatiguing. It is perhaps not surprising that when we become residents, being thrown into the deep end with a constant flow of patients while having a gruelling work schedule, we find ourselves exhausted and our intention to serve with compassion a distant ideal. When we become independent practitioners, after being conditioned to believe that compassion is limited, we may offer compassionate care guardedly, perhaps unconsciously trying to shield ourselves from increased patient demands, time pressures, and the "compassion fatigue" that plague healthcare today. But does it have to be this way?

The purpose of this book is to lay out succinctly the scientific evidence showing that compassion is both innate and trainable. We will see that we

already have within ourselves a natural store of deep compassion and wisdom. There are also many ways to cultivate compassion to support the practice of medicine and the art of caregiving in general. The training described in this book draws on both contemplative and scientific disciplines to help us develop cognitive, attentional, affective, and somatic skills that are critical for the cultivation of compassion. Compassion not only benefits those we serve, produces better patient care, and improves our healthcare system; it is also a boundless source of energy, resilience, and wellness so that, as we serve, we can also enjoy a truly flourishing life.

In this chapter, we begin by examining the definitions of "empathy" and "compassion." Although these two terms are distinct, they have been used interchangeably, which has helped perpetuate the common misconception that compassion is finite and emotionally draining. We will also look at their evolution to gain an appreciation of how humans became successful as a species because of our nurturing, altruistic, and compassionate attributes that have evolved over millions of years.

## Empathy

The word "empathy" has its origin in the ancient Greek *empatheia*, which literally means *en* (in) *pathos* (passion). The philosopher Robert Vischer was the first to use the German expression *einfühlung*, meaning "feeling into," which was later translated into the English word "empathy" by Edward Bradford Titchener, one of the founding fathers of the discipline of psychology.[1]

In addition to the notion of *feeling into* the experiences of another (an *affective* component), contemporary scientific usage of the term "empathy" also encompasses a *cognitive* component. Also called *perspective-taking* or *mentalizing*, this cognitive component involves a differentiation between the experience of another and that of the self. According to Singer and colleagues,[2] empathy is a human capacity to share and understand others' emotions without confusing them with one's own feelings. In other words, we empathize with others when we vicariously share their affective state, while at the same time we are aware that our response is elicited by their emotion. As such, empathy can be conceptualized as having four components: (1) an affective sharing, (2) an isomorphism of this affective

sharing (i.e., sharing the same emotional state as the other), (3) a mental representation of the other's affective state, and (4) a top-down discrimination of self from other.[3] From this definition, we can see an evolution of our understanding of empathy from an original, more automatic "feeling into" the experiences of another (i.e., emotional empathy—the first two components of the concept) to the cognitive modulation of affective sharing through a top-down differentiation of self from other (i.e., cognitive empathy—the last two components).

In addition to a distinction between emotional and cognitive empathy, empathy can lead to two divergent responses: empathic distress and empathic concern.[4] *Empathic distress* is an aversive and self-oriented emotional response to others' suffering. It is often associated with withdrawal behaviour to protect oneself from negative emotional experiences when the self–other distinction becomes blurred. Empathic distress is especially relevant for healthcare workers as they are often and repeatedly exposed to others' suffering, which can result in emotional exhaustion and burnout. Fortunately, empathy does not inevitably lead to empathic distress. Through awareness and training, empathy can be transformed skilfully into *empathic concern*, an other-focused, more adaptive and positive emotion and a motivation that primes compassion,[5,6,7] a topic that I discuss in the next section.

The origin of empathy can be traced back to well beyond the emergence of human and non-human primates. Its earliest vestiges can be found more than a hundred million years ago in primitive mammalian species including elephants, dolphins, and whales, in the forms of motor mimicry, emotional contagion, and pre-concern.[8] From dogs howling to the distant cries of coyotes (mimicry), to toddlers crying when another toddler cries in a nursery (emotional contagion), to the seemingly spontaneous approaching behaviour of a young rhesus monkey to another which is injured (pre-concern), there are abundant behavioural examples in the natural world that are considered precursors of empathy. Using "Russian dolls" as a model, the Dutch primatologist and ethologist Frans de Waal suggested that emotional connection is the innermost core around which empathy evolves and is constructed (Figure 1.1).[8] Bodily and emotional connection—the innermost core—induces in the subject an emotional state that is similar to that of the object (i.e., state-matching between subject and object). As prefrontal lobe functioning and self–other distinction increase in higher species, sympathetic

concern and perspective-taking—the doll's middle and outer layers—evolve. The hard-wired innermost emotional core, however, remains fundamentally linked to the outer layers and generates somatic/emotional perception and action (perception–action mechanism). According to de Waal, empathy has evolved and been selected for its prosocial, protective, and survival value.[8,9] In particular, empathy is likely to have emerged as a result of increased parental care as a means to improve offspring survival in species with a so-called *K-selected life history pattern* (long individual life span, small litter size, immaturity at birth with long dependence on parental care, low offspring mortality) rather than in an *r-selected species* with the opposite life history pattern.[10,11]

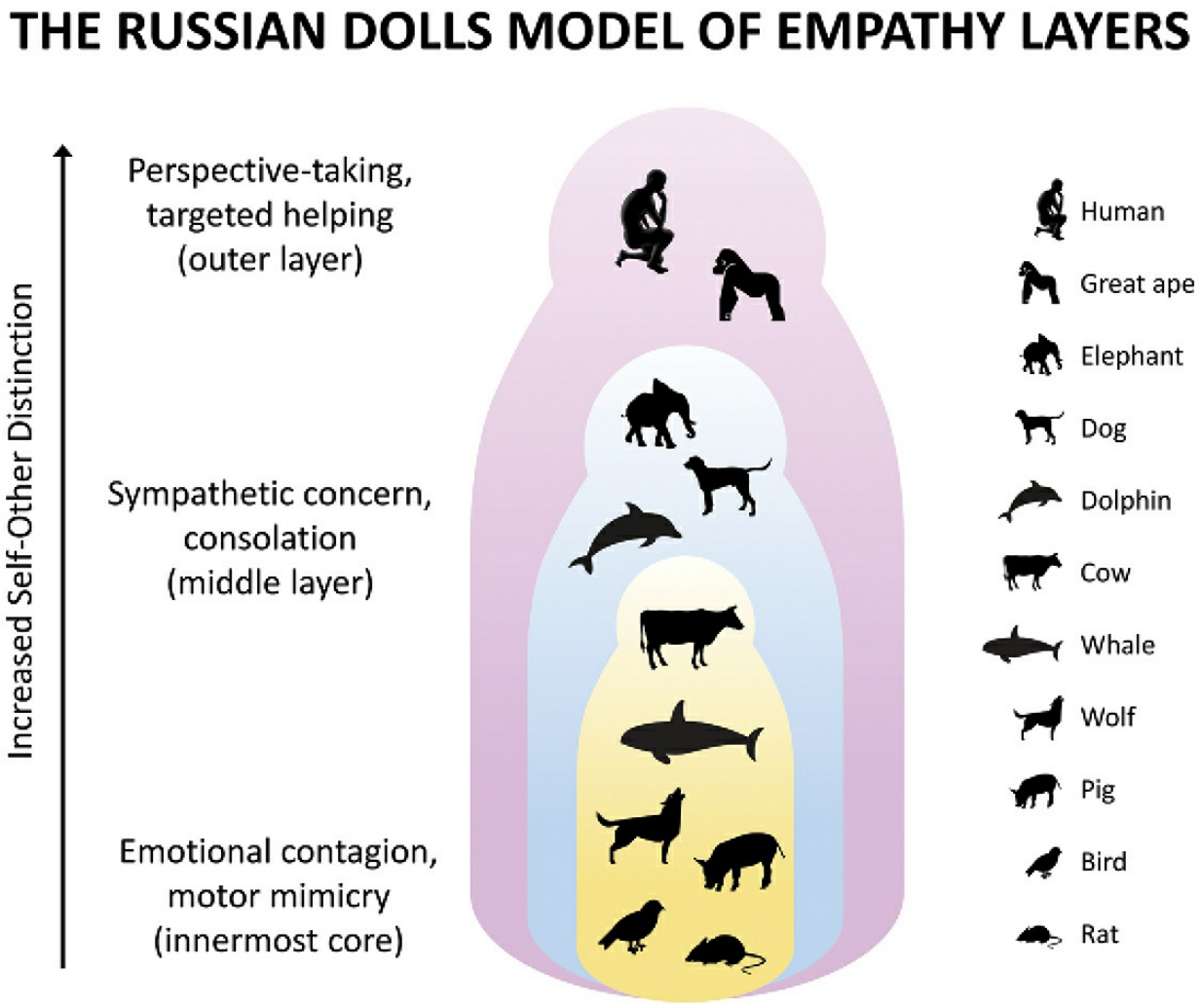


**Figure 1.1** The Russian dolls model showing the layered nature of empathy as proposed by Frans de

Waal.[8]

## Compassion

The term “compassion” derives from the Latin word *compati*, meaning literally *to suffer with*. Considered one of the most cherished of virtues among all major religious traditions, the practice of compassion has been described in the Vedic Upanishads (written between 500 and 800 BCE) and the early Buddhist scriptures (500 BCE) in ancient India. Later, compassion emerged in the Islamic Qur’an in the recitations of Rahman,[12] in the ideals of Tzedakah in the Jewish Torah, in the medical texts of the Babylonians,[13] in the Bible of the Christian faith, and in the oral history of Native Americans. Today, compassion is advocated in many religions and is epitomized by many figures, including the 14th Dalai Lama, Mother Theresa, Desmond Tutu, and Nelson Mandela, to name just a few.

The definition of compassion, however, varies according to cultural context, as do the functions and qualities attributed to it. For example, Aristotle argued that compassion arises only when the other’s suffering is serious, when we have some sense of that suffering, and when the other deserves our compassion. There have been diverging views about whether compassion is an emotion,[14] motivation,[15] or a multidimensional construct.[16] Most contemplative traditions as well as contemporary scientific disciplines, however, generally converge on a definition of compassion that is multifaceted. For example, Geshe Thupten Jinpa, translator for the 14th Dalai Lama, defines compassion as a multidimensional process comprised of four key 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).[16] Similarly, emotions researcher Paul Ekman suggests four dimensions of compassion: (1) empathic compassion (being in touch with the feelings of others who suffer), (2) action compassion (taking action to alleviate suffering), (3) concerned compassion (based on a motivation for helping), and (4) aspirational compassion (linked to a more cognitive desire to develop compassion).[17]

For the purpose of this book, I will use a definition of compassion that is consistent with Eastern traditions and is also accepted by most social cognitive neuroscientists and social psychologists: compassion is a sensitivity to the suffering of self and others with a commitment to alleviating and preventing it.[15] There are three implicit components in this definition: (1) a (brief) affective empathy—one briefly "feels into" the negative experience of another; (2) a cognitive labeling of the experience as suffering by the other, including the ability to take perspective of the other and to engage in self–other differentiation; and (3) a desire or readiness to alleviate that suffering. Importantly, it is this third component that differentiates compassion from empathy; that is, unlike empathy, compassion directs one's attention to help others. It involves top-down processing, such that there is a more immediate self–other differentiation and a shift to recognize suffering as common to all humanity. It is also interesting to note that, for the third component, one does not have to actually help others but only to have the desire to do so.

As discussed in the previous section, empathy can lead to two responses: empathic distress and empathic concern (which primes compassion). We can now see that a critical component of these differential responses is the success of self–other differentiation. In empathic distress, there is an over-involvement or over-identification of the self in the perception of another's suffering, producing self-focused, aversive, and avoidant behaviour. In contrast, in empathic concern, after an initial brief affective empathy, one quickly shifts and differentiates oneself from the other to allow for other-focused, prosocial, helping motivations and behaviours to emerge.

With the difference between empathic distress and empathic concern (compassion) in mind, it is important to note here that the term "compassion fatigue" is a misnomer.[18,19,20,21] First coined by Carla Joinson in 1992, it describes a unique form of burnout in nurses that arises from a variety of stressors and results in a "loss of the ability to nurture."[22] Later, Figley described it as a "caregiver's reduced capacity or interest in being empathic or bearing the suffering of clients."[23] It is a "manifestation of succumbing to the demands of client care over self-care of those who provide the care of clients as a professional."[24] The characteristics of distress, over-identification with the suffering of others, and the lack of self-care that these authors suggested are consistent with empathic distress. "Empathic fatigue" (or "empathic distress") is therefore a better term than "compassion fatigue" to

describe this unique form of burnout, although the latter is still commonly used in the literature. This distinction is not only one of semantics, but it is crucial because (1) numerous studies have demonstrated the physical and psychological benefits of compassion on caregivers (see Chapter 3); (2) advances in neurosciences have shown that the brain networks that mediate empathic distress and compassion are distinct (see Chapter 5); (3) there is an inverse relationship between compassion and burnout; that is, high compassion is protective against burnout, whereas low compassion increases the risk of burnout (see Chapter 7); (4) the lack of self-care—a major cause of empathic fatigue and burnout—can be remedied by cultivating inner compassion (see Chapter 7); and (5) the wish or motivation for others to be free from suffering, a feature that distinguishes compassion from empathy, makes compassion a wellspring of indefatigable energy for caregivers, even in situations when no action can be taken to produce useful results.[20,21]

Compassion is related to three other concepts: altruism, sympathy, and pity. Compassion is differentiated from *altruism* in that altruism spans the gamut from a mere motivational state to alleviate others' suffering[25] to the *actual* engagement in helping behaviours.[26] Both compassion and altruism are thus associated with prosocial motivations. "Sympathy" derives from the Latin word *sympatheia*, meaning literally *feeling (patheia) together (sym).* Although compassion and sympathy are often used interchangeably in everyday language,[9] sympathy lacks the desire to help others that is found more typically in the term compassion. "Pity," derived from the Latin word *pietas* or *pious*, not only suggests a feeling of sorrow or distress over other's suffering, but also involves a subtle feeling of superiority over the person who is suffering.[14]

From an evolutionary perspective, compassion requires higher order executive functions that are found only in primates, and it is thus a much more recent phenomenon than empathy. While non-human primates may exhibit "compassionate" behaviours, these behaviours are distinct from those in humans. For example, chimpanzees and bonobos, which shared common ancestry with humans around 6–8 million years ago, are known to provide *fleeting* help to those able to reciprocate the favour, and they engage in extended care for *infants*.[8] What is unique in ancient hominids is their provision of care to *adults* and for *extended* periods of time.[27] Indeed,

anthropological evidence from remains of skulls, teeth, and bones dating back more than a million years ago indicates that early humans with congenital deformities, illnesses, and injuries sometimes survived for decades, which would not have been possible without the extended care of others.[28] The evolution of compassion generally is believed to result from extreme climate variability more than 5 millions years ago[29] that exerted selective pressure on our ancestors to move into collaborative hunting, food-sharing, and collective parenting.[30] Such social collaboration, in turn, led to the emergence of emotional capacities including prosociality.[27] These capabilities enabled our ancestors to risk their own well-being to protect others from predators, to forgo immediate gratification to share food with others, and to invest in another's well-being when the person being helped is a stranger who gives the benefactor no immediate benefit.[28] Interestingly, this period paralleled a time when the human brain became larger and more complex with the development of the neocortex, the significance of which will be discussed in Chapter 3.

## Inner Compassion

Compassion can flow in three directions: to others, from others, and to self. Self-compassion, a Western psychological construct popularized by researcher Kristin Neff,[31] is defined as compassion for oneself, or a sensitivity to one's own suffering and a desire to alleviate that suffering.[12] Neff proposed that self-compassion is composed of three components: (1) *self-kindness*—feelings of loving-kindness toward one's self, similar to what a compassionate person would feel toward another, together with the desire to alleviate any suffering one may feel rather than being harshly self-critical; (2) *mindfulness*—a sense of balance or equanimity, as well as nonjudgment and receptivity toward one's thoughts, feelings, and experiences, rather than over-identifying with them; and (3) *common humanity*—a sense of shared membership with the rest of humanity, with all the accompanying joys, trials, and tribulations, rather than seeing them as separate and isolating.[32] Distinct from the long-established Western focus on self-esteem, self-compassion has been shown to be an important indicator for psychological well-being.[32,33] Indeed, Neff suggested that self-esteem is based on downward social

comparison and judgment of self-worth and is often associated with narcissism, self-centredness, reduced concern for others, out-group discrimination, and even hostility and violence.[33] Evolutionarily, self-compassion is traceable to the self-grooming behaviour of primates.[9]

## Survival of the Kindest

Like many who grow up in a competitive, meritocratic culture, I used to believe that Charles Darwin's (1809–1882) "survival of the fittest" is a law of nature and that successes are guaranteed for the brightest and hardest working —assuming unconsciously that everyone has equal opportunities—with compassion almost an afterthought. This "law" seems to run counter to the evidence we have reviewed here showing that humans have evolved to become more collaborative and compassionate in our quest to thrive. As I was doing my research, I came to realize that many have misunderstood Darwin's view on natural selection by equating it with "survival of the fittest." In his book *On the Origin of Species* published in 1859,[34] Darwin proposed natural selection as a process to explain how species evolve over time. In this process, genotypic variations that increase a species' chances of survival are preserved and passed to the next generation, so that eventually only individuals with favourable traits that are most adaptable to their particular environment survive. It is worth noting that Darwin did not coin the phrase "survival of the fittest." Instead, it was the social Darwinist Herbert Spencer (1820–1903) who first coined this phrase, 7 years after Darwin's publication of his theory. Borrowing Darwin's concept on biology, Spencer expanded and applied it to other disciplines, including economic, social, and political philosophies, to justify cut-throat economic competition, eugenics, and racism.[35] Since then, "survival of the fittest" has been used to suggest that creatures are perpetually engaged in a merciless struggle in which only the fittest survive. This adversarial worldview was further popularized by Thomas H. Huxley (1825–1895), known as "Darwin's bulldog," and by the poet Alfred Tennyson (1809–1892) who suggested that nature is "red in tooth and claw."[36] It is revealing to find that, contrary to this cruel, competitive paradigm that is commonly attributed to him, Darwin later wrote about the importance of sympathy (what we would call compassion

today) in *Descent of Man* in 1871: “In however complex a manner [sympathy] may have originated, as it is one of high importance to all those animals which aid and defend one another, it will have been increased through natural selection; for those communities, which included the greatest number of the most sympathetic members would flourish best, and rear the greatest number of offspring.” He also wrote: “We are impelled to relieve the sufferings of another, in order that our painful feelings may be at the same time relieved.”[37] For Darwin, therefore, “sympathy” is not only essential for survival, but is also the foundation of humanity, in which moral concerns contribute to the development of individuals and communities. From this, we can conclude that “survival of the kindest”[38] may be a better description of the origins and journey of humanity. What is perhaps most fascinating is that, even if you don’t believe in evolution, many ancient sages, prophets, mystics, logicians, and philosophers arrived at the same conclusion on the universality of compassion. Indeed, the principle of compassion lies at the heart of all religious, ethical, and spiritual traditions, a topic that I will discuss in Chapter 4.

## Summary of Key Points

- Empathy and compassion are two distinct concepts. In the simplest s empathy is feeling *into* the experiences of another, whereas compassi feeling *for* another with an additional desire/motivation to alleviat suffering of the other.
- Empathy has four components: (1) an affective sharing, (2) isomorphism of this affective sharing (i.e., sharing the same emot state of the other), (3) a mental representation of the other’s affective s and (4) a top-down discrimination of self from other. The first components are sometimes called *emotional empathy*, whereas the las components are called *cognitive empathy*.
- Empathy can lead to two responses, depending on emotion regula empathic distress and empathic concern. When emotion is unregul empathic distress occurs, which is an aversive and self-oriented emot response to others’ suffering. When emotion is regulated, emp concern occurs, which is an other-focused, adaptive, positive emotion motivation. In other words, empathy is often a precursor to and pr

compassion when emotion is regulated, but empathy is not compassior

- Compassion has three components: (1) a (brief) affective empathy– briefly "feels into" the negative experience of another; (2) a cogr labeling of the experience as suffering by the other, including the abil take perspective of the other and to engage in self–other differentia and (3) a desire or readiness to alleviate that suffering. It is this component that additionally differentiates compassion from empathy; is, unlike empathy, compassion directs one's attention to help ot which may or may not involve actually helping these others.
- "Compassion fatigue" is a misnomer. "Empathic fatigue" is a better te capture the distress, over-identification with the suffering of others, an lack of self-care that are characteristics of caring professi experiencing empathic distress or burnout.
- Compassion is a much more recent evolutional phenomenon than emp because compassion requires higher order executive functions tha found only in primates.
- Compassion can flow in three directions: to others, from others, and to

## References


1. Stueber K. Empathy. In: Zalta EN, ed. *The Stanford Encyclopedia of Philosophy*. Stanfor Stanford University; 2017. https://plato.stanford.edu/entries/empathy/
2. de Vignemont F, Singer T. The empathic brain: how, when and why? *Trends Cog* 2006;10(10):435–441.
3. Singer T, Lamm C. The social neuroscience of empathy. In: Miller MB, Kingstone A, eds. *Cognitive Neuroscience 2009*. Boston, Mass: Blackwell Pubulication on behalf of the New Academy of Sciences; 2009:81–95.
4. Vrtička P, Favre P, Singer T. Compassion and the brain. In: Gilbert P, ed. *Compassion: Co Research and Applications*. Oxon, UK: Routledge, Taylor & Francis Group; 2017:135–150.
5. Eisenberg N, Fabes RA, Miller PA, et al. Relation of sympathy and personal distress to pro behavior: A multimethod study. *J Pers Soc Psychol.* 1989;57(1):55–66.
6. Batson CD, Fultz J, Schoenrade PA. Distress and empathy: Two qualitatively distinct vi emotions with different motivational consequences. *J Pers.* 1987;55(1):19–39.
7. Batson CD, Duncan BD, Ackerman P, Buckley T, Birch K. Is empathic emotion a source of alt motivation? *J Pers Soc Psychol.* 1981;40(2):290–302.
8. de Waal FB. Putting the altruism back into altruism: the evolution of empathy. *Annu Rev P* 2008;59:279–300.
9. de Waal F. *The Age of Empathy*. New York: Three Rivers Press; 2009.
10. MacArthur RH, Wilson EO. *The Theory of Island Biogeography*. Princeton, NJ: Princeton Uni Press; 1967.
11. Gonzalez-Liencres C, Shamay-Tsoory SG, Brune M. Towards a neuroscience of empathy: Ont phylogeny, brain mechanisms, context and psychopathology. *Neurosci Biobehav*

2013;37(8):1537–1548.
12. Stevens L, Woodruff CC. What is this feeling that I have for myself and for others? Contem perspectives on empathy, compassion, and self-compassion, and their absence. In: Stevens L, Wo CC, eds. *The Neuroscience of Empathy, Compassion, and Self-Compassion.* London: Academic Elsevier; 2018:1–21.
13. Reynolds EH, Wilson JV. Depression and anxiety in Babylon. *J R Soc Med.* 2013;106(12):478–4
14. Goetz JL, Keltner D, Simon-Thomas E. Compassion: An evolutionary analysis and empirical r *Psychol Bull.* 2010;136:351–374.
15. Gilbert P. Compassion: Definitions and controversies. In: Gilbert P, ed. *Compassion: Co Research and Applications.* Oxon: Routledge, Taylor & Francis Group; 2017:3–15.
16. Jazaieri H, Lee I, McGonigal K, et al. A randomized controlled trial of compassion cultivation tr Effects on mindfulness, affect, and emotion regulation. *Motiv Emot.* 2013;38:23–35.
17. Ekman P. Moving toward global compassion. 2014. www.paulekman.com
18. Hofmeyer A, Kennedy K, Taylor R. Contesting the term "compassion fatigue": Integrating fi from social neuroscience and self-care research. *Collegian.* 2020;27(2):232–237.
19. Dowling T. Compassion does not fatigue! *Can Vet J.* 2018;59(7):749–750.
20. Ricard M. *Altruism: The Power of Compassion to Change Yourself and the World.* New York: Brown and Company; 2015.
21. Halifax J. *Standing at the Edge*. New York: Martin's Press; 2018.
22. Joinson C. Coping with compassion fatigue. *Nursing.* 1992;22(4):116, 118–119, 120.
23. Figley CR. Introduction. In: Figley CR, ed. *Compassion Fatigue: Secondary Traumatic Disorders from Treating the Traumatized.* New York: Brunner Mazel; 1995:xiii–xxii.
24. Figley CR, Figley KR. Compassion fatigue resilience. In: Seppälä EM, Simon-Thomas E, Brov Worline MC, Cameron CD, Doty J, eds. *The Oxford Handbook of Compassion Science.* New Oxford University Press; 2017:387–398.
25. Batson C. *Altruism in Humans.* New York: Oxford University Press; 2011.
26. Monroe KR. *The Heart of Altruism: Perceptions of a Common Humanity.* Princeton, NJ: Pri University Press; 1996.
27. Spikins P. Prehistoric origins. The compassion of far distant strangers. In: Gilbert P, ed. *Compa Concepts, Research and Applications.* Oxon: Routledge, Taylor & Francis Group; 2017:16–30.
28. Haddad GG, Sun Y, Wyman RJ, Xu T. Genetic basis of tolerance to $O_2$ deprivation in *Dros melanogaster*. *Proc Natl Acad Sci U S A.* 1997;94(20):10809–10812.
29. Potts R, Faith JT. Alternating high and low climate variability: The context of natural selecti speciation in Plio-Pleistocene hominin evolution. *J Hum Evol.* 2015;87:5–20.
30. Domínguez-Rodrigo M, Bunn HT, Mabulla AZP, et al. On meat eating and human evoluti taphonomic analysis of BK4b (Upper Bed II, Olduvai Gorge, Tanzania), and its bearing on h megafaunal consumption. *Quatern Int.* 2014;322:129–152.
31. Neff K. *Self-Compassion: The Proven Power of Being Kind to Yourself.* New York: William M 2015.
32. Neff KD. The development and validation of a scale to measure self-compassion. *Self Id* 2003;2:223–250.
33. Neff K. Self-compassion: An alternative conceptualization of a healthy attitude toward onesel *Identity.* 2003;2:85–101.
34. Darwin C. *On the Origin of Species.* West Sussex, UK: John Wiley & Sons; 2020.
35. Burdett C. Post Darwin: Social darwinism, degeneration, eugenics. British L https://www.bl.uk/romantics-and-victorians/articles/post-darwin-social-darwinism-degeneration-eugenics
36. Doty J. Preface. In: Seppälä EM, Simon-Thomas E, Brown SL, Worline MC, Cameron CD, I eds. *The Oxford Handbook of Compassion Science.* New York: Oxford University Press; 201 xxii.

37. Darwin C. *The Descent of Man*. New York: Penguin Classics; 2004.
38. Keltner D. *Born to be Good: The Science of a Meaningful Life.* New York: W. W. Norton; 2009.