



Differences in the Semantics of Prosocial Words: an Exploration of Compassion and Kindness

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Abstract

Objectives The study of prosocial behaviour has accelerated greatly in the last 20 years. Researchers are exploring different domains of prosocial behaviour such as compassion, kindness, caring, cooperation, empathy, sympathy, love, altruism and morality. While these constructs can overlap, and are sometimes used interchangeably, they also have distinctive features that require careful elucidation. This paper discusses some of the controversies and complexities of describing different (prosocial) mental states, followed by a study investigating the differences between two related prosocial concepts: compassion and kindness.

Methods For the study, a scenario-based questionnaire was developed to assess the degree to which a student ($N = 222$) and a community ($N = 112$) sample judged scenarios in terms of compassion or kindness. Subsequently, participants rated emotions (e.g. sadness, anxiety, anger, disgust, joy) associated with each scenario.

Results Both groups clearly distinguished kindness from compassion in the scenarios on the basis of suffering. In addition, participants rated compassion-based scenarios as significantly higher on sadness, anger, anxiety and disgust, whereas kindness-based scenarios had higher levels of joy. As a follow-up, a further sample (29 male, 63 female) also rated compassionate scenarios as involving significantly more suffering compared to the kindness scenarios.

Conclusions Although overlapping concepts, compassion and kindness are clearly understood as different processes with different foci, competencies and emotion textures. This has implications for research in prosocial behaviour, and the cultivation of kindness and compassion for psychotherapy and in general.

Keywords Compassion · Loving-kindness · Kindness · Prosocial · Suffering

The last 20 years has seen a rapid increase in the conceptualisation and research on prosocial motivation and behaviour (Baumsteiger and Siegel 2019; Colonnello et al. 2017; Keltner et al. 2014). Eisenberg et al. (2016) define prosocial behaviour as “voluntary behaviour intended to benefit another, such as helping, donating, sharing and comforting” (p.1688). Underpinning prosocial behaviour can be a variety of overlapping but different concepts and processes such as

cooperation (Peysakhovich et al. 2014), care-providing (Gilbert 1989/2016; Mayseless 2016), altruism (Preston 2013), empathy (Bloom 2017), sympathy (Eisenberg et al. 2015), compassion (Böckler et al. 2016; Gilbert 2017a; Seppälä et al. 2017), basic kindness (Curry et al. 2018; Phillips and Taylor 2009) and loving-kindness (Hofmann et al. 2011), including directing it to oneself (Neff and Germer 2013).

As research has progressed, the need for clarity on the use and definitions of “prosocial” terms and processes has become more evident (Basran et al. 2019; Baumsteiger and Siegel 2018; Gilbert 2017a). For example, at times, concepts such as prosocial, altruism, helping, kindness, love, caring, concern, compassion, empathy, sympathy and benevolence are used interchangeably. However, this may cloud understanding of their multiple textures, overlaps and differences and how to cultivate them, both for oneself and within communities (Bierhoff 2005). One problem is with language and our

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descriptive phenomenology of such mental states. A famous historical example of this problem was the confusion of compassion with pity. The Western philosopher Schopenhauer (1788–1860), who shared the Buddhist idea that life is full of suffering, was very influenced by the Buddhist antidote to suffering and the basis for morality and ethics was the cultivation of compassion. Unfortunately, Nietzsche (1844–1900) opposed him and thought compassion was a very poor grounding for moral behaviour or duty. The problem was with their definitions. This was noted by Cartwright (1988): “because Schopenhauer and Nietzsche refer to two different emotions by the German noun ‘Mitleid’; that it is best to understand Schopenhauer’s conception of ‘Mitleid’ as ‘compassion’ and Nietzsche’s as ‘pity.’” (p.1)

Resistance to the concept “compassion” remains and comes partly from the way people and researchers define it. Some see compassion as soft kindness, being nice, but also as weak and self-indulgent, in a world context that demands toughness. In a meta-analysis of fears, blocks and resistance to compassion, Kirby et al. (2019) found fears of self-compassion and being open to compassion from others were highly correlated with shame, self-criticism and depression. Basran et al. (2019) found that resistances to compassion for others were significantly correlated with narcissism, ruthless self-ambition and fears of inferiority. So, the words, language and socially shared definitions we use when trying to promote prosocial behaviours and values for ourselves, clients and society in general matters a great deal.

One early philosopher who addressed the problem of our shared understanding of words, meanings and mental phenomenology was Socrates (399–270 BCE; Hackett 2016). His student Plato went on to teach Aristotle who wrote on the nature of compassion (Nussbaum 2001). Socrates developed a method of enquiry, sometimes called maieutics, the method of elenchus, as Socratic questioning to explore how people understand concepts and use words for conceptual thinking. He noted that words such as honour, bravery, duty, ethics and love could be conceptualised differently and mean different things to different people. Only through dialogue with exemplars and counter-exemplars could one gain insight into how people conceptualise such different concepts (Hackett 2016). Maieutics highlights the fact that words can only be defined via their relationship with other words and concepts and how they are used. This study follows this process of using examples to elicit meaning in regard to kindness and compassion.

There have been many variations in the suggested definition and the constituents of compassion (Gilbert 2017a) but as an evolved care-rooted motivation, compassion has (like other motives) a stimulus (activation-engagement) and response (appropriate action) process. Hence, compassion can be defined as *sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it* (Gilbert 2017a). The

stimulus and *engagement* with suffering depends upon a certain kind of courage and willingness to engage (rather than avoid), attentional sensitivity, capacity for being emotionally moved (sympathy), being able to be tolerant of any distress arising, be able to make sense of that distress and need (with empathy) and being non-judgemental. The response and *action* component requires attention not to the distress, but to the wise alleviation of the distress (e.g. a doctor pays attention to what the treatment should be), ability to run scenarios in one’s mind (of helpfulness) and generate appropriate feelings and behaviours according to the context of what is necessary and helpful (Gilbert 2009, 2017b). What turns basic (mammalian) caring *into compassion* is when caring is guided by our new brain competencies of human self-awareness, intelligence, reasoning and meta-cognition and being able to predict the consequence of our behaviour and monitor our behaviour in line with those predictions (Dunbar 2017). Compassion is therefore caring purposely, mindfully aware, deliberately thoughtfully and chosen (Gilbert 2009, 2017b; Gilbert and Choden 2013).

The central core of compassion is therefore the willingness and *courage* to turn towards and engage in suffering allied to (the discovery and cultivation of) *wisdom* of how best to be or act. In this type of approach, the emotions associated with compassion are contextual. For example, a firefighter entering a burning house to save a family could feel anxious, someone fighting injustice could feel anger and someone consoling a dying person, sad. Hence, they will experience very different emotions and actions according to the context. Compassionate behaviour can also be based on one’s moral beliefs and self-identity rather be emotion-based (Loewenstein and Small 2007). Compassionate facial expressions also differ according to the context and the message to be conveyed (Falconer et al. 2019). What is common to each of these domains is *the motivation* to address suffering which pre-exists any specific event.

Gilbert and Choden (2013) also noted that the *prevention* of suffering is implicit in many traditions and therefore should be added to its definition, although many Western definitions still lack it. This means that any act which has the intention of preventing suffering could be an example of a compassionate act. Compassion intention would thereby extend to a whole range of human activities like legal institutions, laws, vaccinations and healthy eating. Compassion can therefore give rise to a self-identity and way of living which is following the mindful intention in all our activities “to be helpful not harmful” while recognising it’s easy for our minds to act harmfully (Gilbert 2017b, 2018).

A different prosocial concept is kindness, although kindness and compassion are often used interchangeably (Hofmann et al. 2011). In their major meta-analysis on the beneficial effects of behaving kindly to others on the well-being of the provider, Curry et al. (2018) define kindness very

simply as, “kindness refers to actions intended to benefit others” (p.321). They then highlight that kind behaviour can be underpinned by different motivations, including kin altruism, mutualism, reciprocal altruism and competitive altruism. Hence, if we went with this definition, there is nothing specific about kindness that could not be applied to many other prosocial terms and behaviours. However, in a fMRI meta-analysis of kind and altruistic behaviour, Cutler and Campbell-Meiklejohn (2019) reveal that there can be different motivations for helpful and kind behaviour linking to different neurophysiological patterns. Evolutionists also suggest that while people may consciously believe they are behaving with kindly and good intention, nevertheless there may well be an underlying, non-conscious genetic payoff.

In their historical and philosophical treatise on *Kindness*, Phillips and Taylor (2009) link kindness to its root, which is “treating others like kin”. They highlight (as Socrates would argue) how the concept of kindness is historically connected to complex networks of other concepts such as sympathy, empathy, benevolence, generosity and compassion, and is rooted in the concept of human interdependency much as compassion is. Similarly, Ballatt and Campling (2011) titled their important book on caring in the health service *Intelligent Kindness*. They, like Phillips and Taylor (2009), link kindness to concepts such as sympathy, generosity, highlighting the importance of “treating others like kin” when caring for people who are unwell and recognising the overlapping nature with compassion. Some Buddhist and contemplative traditions distinguish four basic qualities to cultivate divine abodes: *karuṇā* (compassion), *metta* (benevolent kindness), *mudita* (sympathetic joy) and *upekka* (equanimity). Although all are clearly prosocial, interdependent and support each other, they are also different. *Karuṇā* is focused on the preparedness to engage with, and wish to alleviate, suffering in all sentient beings, whereas *metta* is the desire to create the conditions for the arising of happiness and well-being is more closely associated with kindness (Dalai Lama 1995, 2001; Tsering 2008). So *karuṇā* (compassion) and *metta* (benevolence–kindness) address different sentiments. The Dalai Lama (2001) roots compassion and kindness in different motivations. Compassion focuses on the motive to relieve suffering, as he indicated, “What is compassion? Compassion is the wish that others be free of suffering. It is by means of compassion that we aspire to attain enlightenment. It is compassion that inspires us to engage in the virtuous practices that lead to Buddhahood. We must therefore devote ourselves to developing compassion (p.91).”

Kindness, in contrast is much more focused on the motive to see others flourish and be happy. Indeed, he distinguished between these wishes, “Just as compassion is the wish that all sentient beings be free of suffering, loving-kindness is the wish that all may enjoy happiness (p.96)”. Kindness doesn’t really require an analysis of suffering, but compassion does.

When we explored a sample of Western dictionaries such as Oxford, Cambridge and Collins, we found that they defined suffering as a state of “mental and physical pain”. The experience of pain is central. This is not the case, however, in some Buddhist concepts of suffering which are sometimes given the term *Dukkha*. While some scholars use the terms pain and suffering interchangeably to describe *Dukkha*, others do not and refer to the Sutra of the two arrows (Gilbert and Choden 2013). The first arrow creates pain; the second arrow is the suffering that arises from our reactions to the first arrow. Gilbert and Choden (2013) suggested a third arrow which is when we feel ashamed of our reactions and fight with or try to suppress with our own reactions. So, *Dukkha* relates not to the pain itself but our reactions, our beliefs, fears and rages to experiencing pain. When Kabat-Zinn (1982) pioneered the introduction of mindfulness for chronic pain, for whom medicine could do little, the aim was to work with the emotional reactions to pain (the second arrow) rather than pain itself (the first arrow).

Western views of suffering, in contrast, focus on different dimensions of these issues. For example, Sensky (2010) highlighted how we can experience pain in a particular part of the body, but suffering is to do with the whole person. We say, “I have pain in my broken leg” but we don’t say “my broken leg is suffering”; we say, “I am suffering”; suffering is a mental state. Second, the context of pain and the causes of pain and suffering are important. For example, our emotional reaction to breaking a leg because we jumped in front of the car to save somebody might feel quite different than if we did it because we were drunk and careless or because somebody attacked us. The context and timing of loss and pain can be important to how it is experienced and dealt with and our compassion for it. Breaking a leg when we are about to start a sports career, which ends it, would be quite different than if we are middle-aged and a well-established, desk sitting, computer person. So, the physical pain of breaking a leg is the same no matter how it was broken, but the *Dukkha* could be very different. The meaning of, and implications of, pain are important.

In the Western medical model, pain and suffering can be seen as things to be “got rid” rather than of something “to grow through, learn from and change”. The discovery of anaesthesia has been a godsend for those in physical pain, needing surgery or dying of cancer. The Buddha would have been delighted too. Indeed, the emergence of the Enlightenment in Europe was motivated partly by reflections on the appalling suffering of humanity and a belief that science and direct intervention could improve the human condition. The “freedom” they sought was partly freedom from pain and suffering (Gay 1969). So, when Western clinicians talk about being sensitive to suffering, the focus is mostly physical and mental *pain*. This is the basis of course for medicine which seeks the actual removal of disease and the repair of injury which are

causes of pain. This is quite different to the suffering implied in terms of “*dukkha*”. Technical interventions (surgery) address pain, psychotherapeutic one’s and contemplative traditions address *Dukkha*. Indeed, sometimes medical doctors are seen as lacking compassion because although they are technically competent at addressing pain and disease, with surgery or drugs, they may show very little interest in the patients’ feelings, reactions, fears and sadness’s as part of the condition. Such concerns underpin the sense that there has been a loss of compassion in health services (Trzekiak and Mazzarelli 2018)

Stated briefly then the relationship between compassion and suffering and their mutual interdependence is more complex than simple definitions would suggest. Sometimes, compassion is not the alleviation or prevention of pain, but the wise navigation into it and learning from it. Acknowledging the limitations of our ability to deal with the inevitable sufferings of life including its ultimate end, Feldman and Kuyken (2011) highlight the multifaceted textures of compassion in relation to suffering. They suggested “Compassion is the acknowledgment that not all pain can be ‘fixed’ or ‘solved’ but all suffering is made more approachable in a landscape of compassion. Compassion is a multitextured response to pain, sorrow and anguish. It includes kindness, empathy, generosity and acceptance. The strands of courage, tolerance, equanimity are equally woven into the cloth of compassion. Above all, compassion is the capacity to open to the reality of suffering and to aspire to its healing (p. 143).”

Feldman and Kuyken (2011) also stated, “Compassion is an orientation of mind that recognises pain and the universality of pain in human experience and the capacity to meet that pain with kindness, empathy, equanimity and patience. While self-compassion orients to our own experience, compassion extends this orientation to others’ experience (p. 145).”

Compassion may often involve kindness, but kindness does not need to include suffering and compassion. Another core theme relating to suffering and compassion is the degree of suffering arising from the cost of helping. In other words, to what extent do we suffer as a result of trying to help others, be it sacrificing and giving up something important to us or actually being prepared to experience pain, as in the case of providing bone marrow or a kidney for a cancer victim. Indeed, the whole concept of altruism is based on the idea that caring and helping carry a cost and it’s the cost that determines the degree to which it is an altruistic act (Preston 2013). While simple definitions (like those above) are useful starting points, if we only stop with the simple definitions these subtleties and complexities are lost.

For this study, we therefore aimed to explore distinctions between compassion and kindness from everyday usage of the terms, people’s use of these concepts in relationship to specific scenarios that differ in degree of cost, helpfulness, and suffering and sought to clarify if participants viewed the kindness and compassion scenarios differently in terms of suffering. We

hypothesised that compassion-based scenarios would be related to higher levels of distressing emotions such as sadness, fear, anger and disgust and that higher self-image scores would be associated with negative responses to these scenarios. We also hypothesised that negative responses to these scenarios would correlate with self-image goals rather than compassionate goals.

Method

Participants

A total of 222 undergraduate students from a University in the UK participated in the study, which consisted of 159 females and 63 males with ages ranging from 18 to 58 years ($M = 24.44$, $SD = 7.79$). In the first part of the study, we recruited 98 undergraduate students, which included 65 females and 33 males with ages ranging from 18 to 53 years ($M = 23.74$, $SD = 6.70$). In the second part of the study, we recruited 124 students consisting of 30 males and 94 females, with ages ranging from 18–58 ($M = 25.15$, $SD = 8.89$). Students were recruited through the University student pool, where they received course credit for participation. We also recruited a community sample from Australia, which included 112 adults, 82 males and 30 females, with age range from 18–73 years with a mean of 41.77 years ($SD = 13.72$). The community sample was recruited through convenience sampling (e.g. word of mouth, social media platforms such as Twitter and Facebook). There were no eligibility criteria for participation outside of being over 18 years of age and the ability to understand written English. These two groups were chosen to determine if there were differences between undergraduate and community samples in how scenarios were categorised as either compassionate or kind. The sample sizes were chosen because we considered any effect that could not be uncovered with this sample size to be too small to be meaningful. A final community sample comprising 94 adults (29 male, 63 female), ages ranging from 18–50 ($M = 25.67$; $SD = 9.19$), was also recruited to determine the level of suffering in each of the scenarios. This community sample was also recruited through convenience sampling (e.g. word of mouth, social media platforms such as Twitter and Facebook).

Procedure

There were two parts to this study. The first was to determine whether participants would discriminate between compassion and kind scenarios. The second part was to determine whether there was a difference in the emotional pattern, specifically in regards to threat responses (anger, fear), between the compassion and kind scenarios. We collected two independent student samples to address these questions, as how a participant

categorised a scenario in part 1, would influence how they then rated the emotions they would experience in each scenario in part 2. All procedures received approval by the respective ethical bodies, including the Psychology Research Ethics Committee at the University of Derby, and the School of Psychology Research Ethics Committee at the University of Queensland. All measures were completed either on paper or online. The only demographic data collected was gender and age. All research participants who wished to participate were provided an information sheet with an explanation of what the study involved, and they all confirmed they had read and understood this and provided informed consent by completing the consent form.

Measures

Kindness and Compassion Scenarios Scale

Clinical work with compassion-focused therapy (CFT) (Gilbert 2000, 2010, 2014; Gilbert and Choden 2013) suggests that kindness training is different to compassion training, partly because compassion involves more attention to suffering and more therapeutic training in competencies such as empathy, sympathy and distress tolerance compared to kindness. During one CFT training workshop, participants were asked to think of examples they would describe as kind and others they would describe as compassionate. From those examples provided, the research team then developed 18 scenarios in order to potentially discriminate these two prosocial constructs. Specifically, the authors originally generated a number of scenarios that were informed by the evolutionary approach (Gilbert 2009; Gilbert and Choden 2013) and the Dalai Lama's (2001, p 96) definition of compassion (focus on suffering) and kindness (focus on well-being) and the examples provided by the CFT workshop participants. Discussion were had amongst the authors regarding all generated items and 18 scenarios were selected with 10 of the scenarios representing kindness and eight representing compassion. This was called the Kindness and Compassion Scenarios Scale. An example a scenario is, "Doing a favour for somebody that takes up your time." See Table 1 for all 18 scenarios. Under each scenario, the participant had to categorise it as either, "I think this scenario is better described as being a *kind* scenario" or "I think this scenario is better described as being a *compassionate* scenario".

The Emotions of Kindness and Compassion Scale

The Emotions of Kindness and Compassion Scale was developed for this study to assess if different emotions are associated with the compassion and kindness scenarios. To assess this, participants were asked to rate on a 9-point scale from 1 (not at all) to 9 (very much) the following in regards to each

scenario: typical of me, meaningful, sadness, anxiety, anger, disgust and joy. Participants were instructed that, "When people are motivated to help others, they can experience different emotions depending on what is required in the helping activity. Read each statement carefully and rate the extent to which you would feel each emotion if you were to engage in this activity." This was done for all 18 scenarios described in the Kindness and Compassion Scenarios Scale. The Cronbach alpha values for the kindness scenarios and compassion scenarios ranged from acceptable to excellent for each of the outcomes: typical ($\alpha = .80$; $\alpha = .79$), meaningful ($\alpha = .87$, $\alpha = .82$), sadness ($\alpha = .87$, $\alpha = .79$), anxiety ($\alpha = .85$, $\alpha = .84$), anger ($\alpha = .86$, $\alpha = .86$), disgust ($\alpha = .80$, $\alpha = .79$) and joy ($\alpha = .84$; $\alpha = .65$).

Negative Responses to Kindness and Compassion Scale

We also had negative responses to the kindness and compassion scenarios scale. Participants were asked six questions about possible responses to the scenarios. These included (1) to what extent would you feel guilty if you didn't do them; (2) to what extent would you feel irritated if you were asked to do them; (3) to what extent do you think you do things for other people to avoid feeling guilty; (4) to what extent do you do things to help other people to get them to like you; (5) to what extent do you feel resentful at the expectations that we should help others; and (6) to what extent do you feel there is too big an expectation on us to help others. Participants had to respond to each of these responses on 9-point scale from 1 (not at all) to 9 (very much).

Compassionate and Self-Image Goals Scale

The Compassionate and Self-Image Goals Scale (Crocker and Canevello 2008) measures compassionate goals and self-image goals on a 5-point Likert scale from 1 (not at all) to 5 (extremely). Self-image goals involve strategic self-presentations and social fears and avoid acting in ways that might solicit criticism or rejection. Compassionate goals focus on supporting others, and caring for the well-being of others. The measure has been shown to have good reliability, internal consistency, and validity (Crocker and Canevello 2008). In our sample, the Cronbach alphas for the compassions scale was $\alpha = .75$, and for the self-image scale $\alpha = .78$.

Level of Suffering

Given the idea that suffering is a key distinguishing factor between kindness and compassion, we also asked participants to rate the level of suffering in each of the scenarios. Specifically, we asked, "We are interested in your views on how much suffering there is in different scenarios. So in each of the scenarios below please rate how much

Table 1 Chi-square goodness of fit results for the distribution of endorsement of kindness or compassion for the prosocial scenarios

Prosocial scenario	UK undergraduate sample			Australian community sample		
	Kindness (<i>n</i>)	Compassion (<i>n</i>)	Chi-Square	Kindness (<i>n</i>)	Compassion (<i>n</i>)	Chi-Square
Doing a favour for somebody that takes up your time	93	4	81.660, $p < .001$	87	23	37.236, $p < .001$
Giving up your evening to baby-sit so that another person can go out instead of you	78	20	34.327, $p < .001$	78	30	21.333, $p < .001$
Giving away your last bit of money to help a homeless person, meaning you can't catch the bus and will need to walk 20 min to get home	23	75	27.592, $p < .001$	24	86	34.945, $p < .001$
Donate a kidney to save a friend	22	75	28.959, $p < .001$	20	90	44.545, $p < .001$
Giving up your time to support a friend at the funeral of a loved parent	25	73	23.510, $p < .001$	7	103	83.782, $p < .001$
Trying to console someone in distress	23	75	27.592, $p < .001$	13	96	63.202, $p < .001$
Mentoring somebody to achieve their career goals	73	24	24.753, $p < .001$	81	29	24.582, $p < .001$
Helping somebody whose car has broken down and knowing you will get dirty in helping	73	24	24.753, $p < .001$	62	48	1.782, $p = .182$
Despite not liking needles, donating your blood to help save the lives of others	30	67	14.113, $p < .001$	29	81	24.582, $p < .001$
Saving your money to buy a present for someone that you know they always wanted	79	18	38.361, $p < .001$	92	18	49.782, $p < .001$
Buying a present for somebody to show you appreciate the friendship	79	18	38.361, $p < .001$	100	10	73.636, $p < .001$
Listening to a colleague you don't like because they are struggling with work stress	50	47	.093, $p = .761$	12	98	67.236, $p < .001$
Genuinely asking the storekeeper how their day is going	76	21	31.186, $p < .001$	68	42	6.145, $p = .013$
Stepping in and trying to do something when you see somebody be racially verbally abused	29	68	15.680, $p < .001$	9	101	76.945, $p < .001$
Stopping and helping somebody who has been injured or hurt on the side of the road	31	67	13.224, $p < .001$	22	88	39.600, $p < .001$
Remembering to call your friend to wish them a happy birthday	85	13	52.898, $p < .001$	92	18	49.782, $p < .001$
Baking cakes for colleagues at work	94	3	85.371, $p < .001$	107	3	98.327, $p < .001$
Offering your spare tickets to a show to somebody	86	12	55.878, $p < .001$	107	3	98.327, $p < .001$

suffering would be involved in each of these acts of helping.” Participants had to respond to each of these scenarios on a 10-point scale from 1 (no suffering) to 10 (very high levels of suffering).

Data Analyses

We conducted a series of goodness of fit-chi squares to determine whether there were any significant differences between how the scenarios were categorised. We then

conducted a series of repeated measures *t* tests to determine whether the emotional pattern for each scenario differed between compassion and kind-based scenarios. Finally, we then conducted bi-variate correlations to determine the strength of relationship between self-image goals and compassionate goals with negative reactions to the prosocial scenarios. We also examined in a multivariate analysis of variance whether there were significant differences between the UK student sample and Australian community sample in regard to the negative

reactions to prosocial scenarios. Finally, we examined using a paired sample *t* tests the differences in suffering for each of the 18 scenarios.

Results

Goodness of fit chi-squares were conducted as we did not have a priori expectation values that could be set. We wanted to leave it open such that the scenarios had equal chance of being selected by participants given that kindness and compassion are often used interchangeably. Based on the results, however, it was clear that students clearly distinguished scenarios in regard to compassionate or kind behaviour. The only exception was for, *Listening to a colleague you don't like because they are struggling with work stress*, which was non-significant, $\chi(1, n = 99) = .093, p = .761$. Once again, this issue of liking–disliking seems to be an important dimension requiring further research. These results give a clear indication that students distinguish kindness from compassion, with the level of suffering being a key dimension of difference between the kind and compassion scenarios. However, in the non-student Australian sample, the *Listening to a colleague you don't like because they are struggling with work stress*, was significant, $\chi(1, n = 112) = 67.236, p = .001$, and *Helping somebody whose car has broken down and knowing you will get dirty in helping* was non-significant, $\chi(1, n = 112) = 1.782, p = .182$. These results indicate there are subtle differences between students and (older) community samples in how scenarios are categorised, which might be due to who individuals are and what they have been exposed to on a daily basis.

In the second part of the study, the emotional responses to the compassion and kindness scenarios were averaged. Then a series of pairwise *t* tests were conducted to determine if the emotional responses to the scenarios significantly differed. Based on the results, as seen in Table 2, all emotional responses differed, with greater levels of sadness, anxiety, anger and disgust experienced in the compassion scenarios compared to the kindness. Moreover, greater levels of joy were experienced in the kindness scenarios. The compassion scenarios were seen as more meaningful, and there was no difference in terms of whether the scenario was typical of the individual or not. The exact findings were found for both the university and community samples.

We then examined goal orientation to see if there were differences on the sample, with a MANOVA finding a significant multivariate interaction, $F(2, 211) = 3.063, p < .049, \eta^2 = .028$. Univariate effects found no significant differences between the groups; see Table 3.

Following this, we then conducted bi-variate correlations to determine the strength of relationship between self-image goals and compassionate goals with negative reactions to the

prosocial scenarios. See Table 4 below where we found that self-image goals were correlated significantly with negative reactions, whereas compassionate goals were negatively associated with negative responses. This was true for both the undergraduate and community samples.

We conducted a multivariate analysis of variance (MANOVA) to determine whether our samples (student vs. community) significantly differed in their negative reactions to the prosocial scenarios (guilt, irritation, avoid guilt, to like you, resentful and expectation); see Table 5. The MANOVA revealed a significant multivariate interaction, $F(2, 207) = 4.685, \eta^2 = .12$. Significant univariate effects were found for the negative reactions of *doing things for other people to avoid feeling guilty*, $F(1,208) = 18.197, p < .001, \eta^2 = .079$ and *feeling resentful at the expectations that we should help others*, $F(1,208) = 14.633, p < .001, \eta^2 = .065$. *Feeling irritated if you were asked to do the prosocial behaviours* was also significant, $F(1,208) = 4.727, p = .031, \eta^2 = .022$, but when applying Bonferroni correction to control for Type II error, it was no longer significant. These results seem to suggest that with age, individuals engage in prosocial behaviour for less negative reasons.

Finally, we also examined whether individuals would rate the compassion scenarios to have higher levels of suffering compared to the kindness scenarios. A paired-sample *t* test found that on average the compassion scenarios ($M = 3.6; SD = 1.49$) had significantly higher levels of suffering than the kindness scenarios ($M = 1.92; SD = 0.95$), $t(93) = 12.614, p < .001$. In Table 6, all 18 scenarios are ranked from scenarios with the most suffering to least suffering, with the compassion scenarios being rated higher on suffering to the kindness scenarios.

Discussion

Our results indicate that individuals naturally distinguish between kindness and compassion. The key to the distinction is indeed the degree and form of suffering included within each scenario, as evidenced in the higher scores of suffering in the compassion compared to the kindness scenarios. So our data highlights the fact that compassion is indeed thought of differently to kindness (Baránková et al. 2019; Dalai Lama 1995, 2001; Strauss et al. 2016). When helpful acts are aimed to reduce or ameliorate suffering, people are more likely to conceptualise them as compassionate acts (Feldman and Kuyken 2011). Importantly, not only do individuals distinguish between kindness and compassionate behaviours, but they ascribe significantly different emotional patterns to them as well. This supports the Dalai Lama (2001) as compassion being focused primarily to alleviate suffering and the causes of suffering and kindness is to create the conditions for happiness and flourishing. Few emotion theorists see compassion

Table 2 The emotional experiences for kindness and compassion scenarios for the UK sample

	UK undergraduate sample				Australian community sample			
	Kindness N = 112	Compassion N = 112	<i>t</i> value	<i>p</i>	Kindness N = 124	Compassion N = 124	<i>t</i> value	<i>p</i>
Typical	6.61 (1.17)	6.51 (1.24)	1.045	.299	6.67 (1.47)	6.87 (1.35)	- 1.938	.055
Meaningful	6.25 (1.39)	6.96 (1.26)	- 5.335	< .001	6.67 (1.53)	7.28 (1.22)	- 6.362	< .001
Sadness	1.40 (.89)	3.96 (1.51)	- 18.153	< .001	2.03 (1.00)	3.96 (1.49)	- 16.440	< .001
Anxiety	2.48 (1.54)	4.36 (1.87)	- 14.847	< .001	2.74 (1.45)	4.36 (1.92)	- 12.820	< .001
Anger	1.28 (.58)	2.16 (.88)	- 12.786	< .001	1.60 (.82)	2.35 (1.17)	- 10.3220	< .001
Disgust	1.18 (.52)	2.03 (.71)	- 13.428	< .001	1.40 (.65)	2.00 (.90)	- 8.932	< .001
Joyful	5.72 (1.37)	3.21 (1.40)	18.927	< .001	6.16 (1.53)	4.56 (1.64)	9.957	< .001

as a specific emotion (Ekman 2016). Our data supports this in that compassion is not linked to any specific emotion or affective state but can give rise to different emotional experiences and textures experienced according to the context (Falconer et al. 2019). It is likely that patterns of emotions will also pertain to different contexts, as for example contexts that require exposure to danger versus consoling.

Given that research is showing that training in empathy, mindfulness and compassion have different neurophysiological effects (Valk et al. 2017); it is likely that underpinning emotional variations between kindness and compassion will have different neurophysiological effects too. Research has also shown that the motivations underpinning helping behaviours (altruistic versus strategic) do have different neurophysiological signatures (Cutler and Campbell-Meiklejohn 2019). This has implications for therapy and personal development training in general. Loving-kindness is an important practice with a range of benefits (Mascaro et al. 2015). Nonetheless, kindness does not capture clearly the core elements of compassion which are courage, dedication and wisdom (Dalai Lama 2001; Gilbert and Choden 2013). As of today, there has been no neurophysiological study on these dimensions of compassion. In addition, there is no study comparing (loving) kindness training with compassion training, and none that control for differences in motivation underpinning

kindness and compassion. Kirby and Baldwin (2018) ran a randomised micro-trial study looking at loving-kindness practices to help parents with difficult child behavioural problems. Although loving-kindness was able to reduce the intensity of emotional experience when dealing with child problem behaviour, these positive findings did not occur when the parent had elevated fears of compassion. Similarly, Kirby and Laczko (2017) explored loving-kindness meditation in adolescents living at home with their parents and found a range of positive benefits, although again these did not occur when the young adult had fears of compassion. It is possible, though yet to be tested, that this is because for people with fears of compassion, engagement in compassion activates personal distress rather than genuine compassion motivation. This is an issue well-articulated in the literature (Eisenberg et al. 2015).

This raises the issue of the link between kindness and compassion training and particularly the potential role of fears, blocks and resistances to them (Gilbert and Mascaro 2017). Indeed, specific interventions may be required for people who have elevated fears and are easily overwhelmed by kindness or compassion interventions. In fact, it is the fears, blocks and resistances that compassion focused therapy specifically addresses (Gilbert 2005, 2010; Kirby et al. 2019). Future research could use scenarios such as these but change the context. Being overwhelmed or personally distressed by the

Table 3 Differences in goal orientation depending on student versus community sample

	UK student sample			Australian community sample			Univariate ANOVA results	
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>F</i>	<i>p</i>
Goal orientation								
Self-image goals	16.36	4.51	109	15.29	5.11	105	2.432	.120
Compassionate goals	25.16	4.46	109	26.10	4.44	105	2.601	.108

F = ANOVA univariate interaction effect

Table 4 Correlations between prosocial scenarios and negative responses

Negative reaction to prosocial scenario	UK undergraduate sample			Australian community sample		
	Mean (SD)	Compassionate goal	Self-image goal	Mean (SD)	Compassionate goal	Self-image goal
To what extent would you feel guilty if you didn't do them	6.15 (2.14)	.144**	.235**	5.63 (2.39)	0.08	.396**
To what extent would you feel irritated if you were asked to do them	3.95 (2.04)	-.289**	.277*	3.38 (1.81)	-.193*	.298**
To what extent do you think you do things for other people to avoid feeling guilty	5.39 (2.22)	-0.099	.209**	4.10 (2.18)	-0.141	.286**
To what extent do you do things to help other people to get them to like you	4.46 (2.23)	-0.03	.297**	4.11 (2.16)	-0.012	.410**
To what extent do you feel resentful at the expectations that we should help others	3.47 (2.31)	-.252**	.198**	2.42 (1.68)	-.258**	.272**
To what extent do you feel there is too big an expectation on us to help others	3.86 (2.47)	-.160*	.185**	3.31 (2.20)	-0.092	.239*

* $p < .05$, ** $p < .01$

suffering of another can create avoidance or dissociation (Eisenberg et al. 2015). However, this is unlikely to be the case for kindness, since it is not focused on suffering.

Barriers pertain to both kindness and compassion. For example, in an fMRI Hein et al. (2010) studied circuits associated with empathy while watching someone in (mild hand prick) pain. These circuits were less active if they were watching somebody who had previously been seen cheating or someone identified as belonging to a different group (football team). Importantly too in political debates, individuals from the general public have spoken about their dislike of “being made to feel guilty for not caring enough for the less fortunate” and a sense of “anger when politicians try to induce caring and compassion by inducing guilt”, as seems to be the case on the caring and support for immigrants; or trying to entice the rich to take a greater sense of responsibility for the poor (Kagan 2018). It may make a big difference to people’s preparedness to act with genuine kindness and/or compassion

if they feel they are voluntarily choosing, rather than feeling that they should do it because it’s expected of them (Catarino et al. 2014). In this regard, we wondered if resentment would relate to different kinds of motivation, particularly individuals who were more self-focused as measured by self-image goals versus compassion goals. Generally speaking, these do not seem to be a distinguishing factor, but it’s clear that individuals can feel resentful when it comes to acting compassionately or kindly if they feel expected or obligated to rather than freely choosing to. In addition, our results suggest that as one ages the negative reactions of avoiding guilt and feeling resentful to act prosocially changes. Our student samples were in their early twenties, whereas our community sample was on average 41.77 years. It is possible with age and life experiences; prosociality is viewed differently.

Interestingly, in terms of amount of suffering, the highest score was for donating a kidney to save a friend, which was 6.68 out of 10, with the majority of the other scenarios scoring

Table 5 Differences in negative reactions depending on student versus community sample

	UK student sample			Australian community sample			Univariate ANOVA results	
	M	SD	N	M	SD	N	F	p
Negative reactions								
To what extent would you feel guilty if you didn't do them	6.15	2.14	106	5.63	2.39	108	2.831	.094
To what extent would you feel irritated if you were asked to do them	3.95	2.04	106	3.38	1.81	108	4.727	.031*
To what extent do you think you do things for other people to avoid feeling guilty	5.39	2.20	106	4.10	2.19	108	18.197	< .001***
To what extent do you do things to help other people to get them to like you	4.46	2.23	106	4.11	2.16	108	1.370	.243
To what extent do you feel resentful at the expectations that we should help others	3.47	2.31	106	2.94	2.08	108	14.633	< .001***
To what extent do you feel there is too big an expectation on us to help others	3.86	2.47	106	3.31	2.35	108	2.899	.090

F = ANOVA univariate interaction effect

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 6 Rank ordering from highest level of suffering to lowest for each scenario

Scenario	Prosocial categorisation	Level of suffering (1–10) ($n = 94$)
1. Donate a kidney to save a friend	Compassion	6.68 ($SD = 2.70$)
2. Stepping in and trying to do something when you see somebody be racially verbally abused	Compassion	3.78 ($SD = 2.27$)
3. Despite not liking needles, donating your blood to help save the lives of others	Compassion	3.58 ($SD = 2.09$)
4. Giving away your last bit of money to help a homeless person, meaning you can't catch the bus and will need to walk 20 min to get home	Compassion	3.48 ($SD = 2.09$)
5. Listening to a colleague you don't like because they are struggling with work stress	Compassion	3.33 ($SD = 1.82$)
6. Stopping and helping somebody who has been injured or hurt on the side of the road	Compassion	2.82 ($SD = 2.18$)
7. Giving up your evening to baby-sit so that another person can go out instead of you	Kindness	2.69 ($SD = 1.59$)
8. Trying to console someone in distress	Compassion	2.60 ($SD = 1.93$)
9. Helping somebody whose car has broken down and knowing you will get dirty in helping	Kindness	2.55 ($SD = 1.59$)
10. Giving up your time to support a friend at the funeral of a loved parent	Compassion	2.55 ($SD = 2.03$)
11. Doing a favour for somebody that takes up your time	Kindness	2.35 ($SD = 1.32$)
12. Baking cakes for colleagues at work	Kindness	2.27 ($SD = 1.54$)
13. Mentoring somebody to achieve their career goals	Kindness	1.87 ($SD = 1.20$)
14. Saving your money to buy a present for someone that you know they always wanted	Kindness	1.82 ($SD = 1.26$)
15. Offering your spare tickets to a show to somebody	Kindness	1.61 ($SD = 1.57$)
16. Buying a present for somebody to show you appreciate the friendship	Kindness	1.40 ($SD = 1.03$)
17. Remembering to call your friend to wish them a happy birthday	Kindness	1.38 ($SD = 1.00$)
18. Genuinely asking the storekeeper how their day is going	Kindness	1.25 ($SD = .94$)

three or below. These results indicate that many of the scenarios were not considered to be high levels of suffering. These results also raise the issue of what would be needed for somebody to rate a scenario as a 10 out of 10 for suffering, given the donating a kidney to save a life only scored 6.68? It could be that many were considering the scenarios from a consequentialist point of view and could also see the reduction of suffering that was occurring by engaging in the action, thus the lower scores. It could also be that given the actions were meaningful this buffered the level of suffering being experienced. Moreover, it is important to determine what is meant by suffering, particularly in relation to other near terms like pain or distress (as discussed above).

Although from research and conceptual point of view it's important to distinguish these different qualities of prosocial motivation and behaviour, it's essential to recognise that *all* the prosocial attributes are essential in compassionate mind trainings and therapies. For example, this includes shared feelings of kindness, gentleness, warmth, sadness and humour and facilitating playfulness and taking (sympathetic) joy in the success of one's client. Building a compassionate therapeutic relationship can involve attachment dynamics of offering a secure base and safe haven that encourage exploration, along with empathy competencies. All of these aim to reduce suffering *and* enable a client to mature, grow and flourish. In the compassion therapies, this growth will also extend to

becoming more compassionate to others and developing an ethical and prosocial grounding for living (Gilbert 2019). What we would not wish to see is kindness being played off against compassion, or ideas that compassion therapies don't focus on kindness. Compassion training does not just address suffering but promotes moral behaviour, eudemonic happiness (happiness from engaging in meaningful activities) and well-being in a way that is different with the concept of kindness.

We also drew attention to the value of distinguishing different motivational systems in therapy and distinguishing them from feelings (Gilbert 2019). For example, depressed mothers can struggle to have feelings for their children. Indeed, the loss of feeling for their children can drive shame and the depression, particularly for postnatally depressed mothers. For depressed people who have become anhedonic, trying to help them *feel* some of the more positive emotions associated with kindness (as indicated in our study) can be counter-productive and can make them feel worse especially if they try and fail. Indeed, as our study shows engaging with compassion can activate distress states (see also Condon and Barrett 2013). Hence compassion therapies first focus on small compassionate behaviors. This study has had a relatively narrow focus and compassion and kindness may differ along dimensions of courage, perseverance, determination, distress

tolerance, moral focus and others not measured here. These dimensions of compassion are less well recognised amongst the general public who are more likely to see compassion as soft, gentle and tender, rather than courageousness, toughness, dedication and wisdom. Perhaps one of our biggest challenges, in enabling business and politics to become more interested in compassion, is to increase awareness of the courage, determination and morality that sits at the heart of compassion (Gilbert 2009, 2018).

Limitations and Future Research Directions

Limitations in the study include (a) the reliance on self-report cross sectional data, (b) the studies relying on undergraduate samples, as well as convenience sampling, thus limiting generalisation of the findings, (c) lack of demographic background information obtained to determine systematic differences in terms of ethnicity, culture, financial status and relationship status, and (d) the results being open to possible social desirability responding. Moreover, although we gained input into the development of the compassion and kind scenarios, how these were constructed was based on the informed views of the study authors. Further testing of these scenarios with other psychometrically valid prosocial measures would be useful to determine their validity. Subsequent research could explore differences between self-conscious emotion such as shame, guilt and pride and also the degree to which individuals behave as a moral reasoning, rather than other motivation (Loewenstein and Small 2007).

Finally, we note that we cannot guarantee that participants had clarity on whether we were asking about suffering in the target person/group experiencing versus how much suffering would there be for themselves as the person doing the compassionate act. Such might shed more light on how compassion and kindness are different. For example, suffering might be higher for the target than for the self for compassion, but higher for the self than for the target in relation to kindness.

Despite limitations, this study provides initial evidence that individuals do discriminate between kindness and compassion, and the emotional pattern that emerges for each differs. In other words, although overlapping, kindness and compassion should be viewed as different and this has implications for future research, mind training and psychotherapy.

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Author Contributions PG, JK and JB were involved in all aspects of the study. MM collected and inputted the data into databases.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in the studies involving human participants were in accordance with the ethical standards of the Psychology Research Ethics Committee at the University of Derby, and the School of Psychology Research Ethics Committee at the University of Queensland and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

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References

- Ballatt, J., & Campling, P. (2011). *Intelligent kindness: Reforming the culture of healthcare*. London: Royal College of Psychiatrists Publications.
- Baránková, M., Halamová, J., & Koróniová, J. (2019). Non-expert views of compassion: consensual qualitative research using focus groups. *Human Affairs*, 29, 6–19.
- Basran, J., Pires, C., Matos, M., McEwan, K., & Gilbert, P. (2019). Styles of leadership, fears of compassion, and competing to avoid inferiority. *Frontiers in Psychology*, 9, 2460. <https://doi.org/10.3389/fpsyg.2018.02460>.
- Baumsteiger, R., & Siegel, J. T. (2019). Measuring prosociality: The development of a prosocial behavioral intentions scale. *Journal of Personality Assessment*, 101(3), 305–314.
- Bierhoff, H. W. (2005). The psychology of compassion and prosocial behaviour. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 148–167). London: Routledge.
- Bloom, P. (2017). *Against empathy: The case for rational compassion*. New York: Random House.
- Böckler, A., Tusche, A., & Singer, T. (2016). The structure of human prosociality: differentiating altruistically motivated, norm motivated, strategically motivated, and self-reported prosocial behavior. *Social Psychological and Personality Science*, 7(6), 530–541.
- Cartwright, D. E. (1988). Schopenhauer's compassion and Nietzsche's pity. *Schopenhauer Jahrbuch*, 69, 557–567 http://www.schopenhauer.philosophie.uni-mainz.de/Aufsaeetze_Jahrbuch/69_1988/Cartwright.pdf.
- Catarino, F., Gilbert, P., McEwan, K., & Baião, R. (2014). Compassion motivations: distinguishing submissive compassion from genuine compassion and its association with shame, submissive behaviour,

- depression, anxiety and stress. *Journal of Social and Clinical Psychology*, 33, 399–412.
- Colonnello, V., Petrocchi, N., & Heinrichs, M. (2017). The psychobiological foundation of prosocial relationships: the role of oxytocin in daily social exchanges. In P. Gilbert (Ed.), *Compassion: concepts, research and applications* (pp. 105–119). London: Routledge.
- Condon, P., & Barrett, L. F. (2013). Conceptualizing and experiencing compassion. *Emotion*, 13, 817–821.
- Crocker, J., & Canevello, A. (2008). Creating and undermining social support in communal relationships: the role of compassionate and self-image goals. *Journal of Personality and Social Psychology*, 95(3), 555–575.
- Curry, O. S., Rowland, L. A., Van Lissa, C. J., Zlotowitz, S., McAlaney, J., & Whitehouse, H. (2018). Happy to help? A systematic review and meta-analysis of the effects of performing acts of kindness on the well-being of the actor. *Journal of Experimental Social Psychology*, 76, 320–329.
- Cutler, J., & Campbell-Meiklejohn, D. (2019). A comparative fMRI meta-analysis of altruistic and strategic decisions to give. *Neuroimage*, 184, 227–241.
- Dalai Lama, D. (1995). *The power of compassion*. London: Thorsons.
- Dalai Lama, D. (2001). *An open heart*. London: Hodder and Stoughton.
- Dunbar, R. I. M. (2017). *Human evolution: A pelican introduction*. London: Penguin UK.
- Eisenberg, N., VanSchyndel, S. K., & Hofer, C. (2015). The association of maternal socialization in childhood and adolescence with adult offsprings' sympathy/caring. *Developmental Psychology*, 51, 7–16. <https://doi.org/10.1037/a0038137>.
- Eisenberg, N., VanSchyndel, S. K., & Spinrad, T. L. (2016). Prosocial motivation: inferences from an opaque body of work. *Child Development*, 87(6), 1668–1678.
- Ekman, P. (2016). What scientists who study emotion agree about. *Perspectives on Psychological Science*, 11, 31–34.
- Falconer, C. J., Lobmaier, J. S., Christoforou, M., Kamboj, S. K., King, J. A., Gilbert, P., & Brewin, C. R. (2019). Compassionate faces: evidence for distinctive facial expressions associated with specific prosocial motivations. *PloS one*, 14(1), e0210283.
- Feldman, C., & Kuyken, W. (2011). Compassion in the landscape of suffering. *Contemporary Buddhism*, 12, 143–155. <https://doi.org/10.1080/14639947.2011.564831>.
- Gay, P. (1969). *The Enlightenment: The science of freedom* (Vol. 2). New York: Random House Inc.
- Gilbert, P. (1989/2016). *Human nature and suffering*. Hove: Psychology Press.
- Gilbert, P. (2000). Social mentalities: Internal 'social' conflicts and the role of inner warmth and compassion in cognitive therapy. In P. Gilbert & K. G. Bailey (Eds.), *Genes on the couch: Explorations in evolutionary psychotherapy* (pp. 118–150). Hove: Psychology Press.
- Gilbert, P. (2005). *Compassion: Conceptualisations, research and use in psychotherapy*. London: Routledge.
- Gilbert, P. (2009). *The compassionate mind: A new approach to the challenge of life*. London: Constable & Robinson.
- Gilbert, P. (2010). *Compassion focused therapy*. London: Routledge.
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, 53, 6–41. <https://doi.org/10.1111/bjc.12043>.
- Gilbert, P. (2017a). Compassion: definitions and controversies. In P. Gilbert (Ed.), *Compassion: concepts, research and applications* (pp. 3–15). London: Routledge.
- Gilbert, P. (2017b). Compassion as a social mentality. In P. Gilbert (Ed.), *Compassion: concepts, research and applications* (pp. 31–68). London: Routledge.
- Gilbert, P. (2018). *Living like crazy*. New York: Annwyn House.
- Gilbert, P. (2019). Psychotherapy for the 21st century: an integrative, evolutionary, contextual, biopsychosocial approach. *Psychology and Psychotherapy: Theory, Research and Practice*, 92, 164–189. <https://doi.org/10.1111/papt.12226>.
- Gilbert, P., & Choden. (2013). *Mindful compassion*. London: Constable & Robinson.
- Gilbert, P., & Mascaro, J. (2017). Compassion, fears, blocks and resistances: An evolutionary investigation. In E. M. Seppälä et al. (Eds.), *The oxford handbook of compassion science* (pp. 399–420). Oxford: Oxford University Press.
- Hackett, W. (2016). *Socrates: The best of Socrates: the founding philosophies of ethics, virtues & life*. London: Socrates Philosophy.
- Hein, G., Silani, G., Preuschhoff, K., Batson, C. D., & Singer, T. (2010). Neural responses to ingroup and outgroup members' suffering predict individual differences in costly helping. *Neuron*, 68, 149–160.
- Hofmann, S. G., Grossman, P., & Hinton, D. E. (2011). Loving-kindness and compassion meditation: potential for psychological interventions. *Clinical Psychology Review*, 31(7), 1126–1132. <https://doi.org/10.1016/j.cpr.2011.07.003>.
- Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: theoretical considerations and preliminary results. *General hospital psychiatry*, 4(1), 33–47.
- Kagan, J. (2018). Three unresolved issues in human morality. *Perspectives on Psychological Science*, 13, 346–358. <https://doi.org/10.1177/1745691617727862>.
- Keltner, D., Kogan, A., Piff, P. K., & Saturn, S. R. (2014). The sociocultural appraisals, values, and emotions (SAVE) framework of prosociality: core processes from gene to meme. *The Annual Review of Psychology*, 65, 425–460. <https://doi.org/10.1146/annurev-psych-010213-115054>.
- Kirby, J. N., & Baldwin, S. (2018). A randomized micro-trial of a loving-kindness meditation to help parents respond to difficult child behavior vignettes. *Journal of Child and Family Studies*, 27(5), 1614–1628.
- Kirby, J., & Gilbert, P. (2017). The emergence of the compassion focused therapies. In P. Gilbert (Ed.), *Compassion: concepts, research and applications* (pp. 258–285). London: Routledge.
- Kirby, J. N., & Laczko, D. (2017). A randomized micro-trial of a loving-kindness meditation for young adults living at home with their parents. *Journal of Child and Family Studies*, 26, 1888–1899.
- Kirby, J. N., Day, J., & Sagar, V. (2019). The 'flow' of compassion: a meta-analysis of the fears of compassion scales and psychological functioning. *Clinical Psychological Review*, 70, 26–39. <https://doi.org/10.1016/j.cpr.2019.03.001>.
- Loewenstein, G., & Small, D. A. (2007). The scarecrow and the tin man: the vicissitudes of human sympathy and caring. *Review of General Psychology*, 11, 112–126. <https://doi.org/10.1037/1089-2680.11.2.112>.
- Mascaro, J. S., Darcher, A., Negi, L. T., & Raison, C. L. (2015). The neural mediators of kindness-based meditation: a theoretical model. *Frontiers in Psychology*, 6, 109.
- Mayseless, O. (2016). *The caring motivation: An integrated theory*. Oxford: Oxford University Press.
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 69(1), 28–44.

- Nussbaum, M. C. (2001). *Upheavals of thought: The intelligence of emotion*. Cambridge: Cambridge University Press.
- Peysakhovich, A., Nowak, M. A., & Rand, D. G. (2014). Humans display a 'cooperative phenotype' that is domain general and temporally stable. *Nature Communications*, 5, 4939.
- Phillips, A., & Taylor, B. (2009). *On kindness*. London: Hamish Books.
- Preston, S. D. (2013). The origins of altruism in offspring care. *Psychological Bulletin*, 139, 1305–1341.
- Sensky, T. (2010). Suffering. *International Journal of Integrated Care*, 10, 66–68.
- Seppälä, E. M., Simon-Thomas, E., Brown, S. L., Worline, M. C., Cameron, C. D., & Doty, J. R. (Eds.). (2017). *The Oxford handbook of compassion science*. New York: Oxford University Press.
- Strauss, C., Lever Taylor, B., Gu, J., Kuyken, W., Baer, R., Jones, F., & Cavanagh, K. (2016). What is compassion and how can we measure it? A review of definitions and measures. *Clinical Psychology Review*, 47, 15–27. <https://doi.org/10.1016/j.cpr.2016.05.004>.
- Trzekiak, S., & Mazzarelli, A. (2018). *Compassionomics: The revolutionary scientific evidence that caring makes a difference*. New York: Stuten GR.
- Tsering, G. T. (2008). *The awakening mind: The foundation of buddhist thought* (Vol. 4). London: Wisdom publications.
- Valk, S. L., Bernhardt, B. C., Trautwein, F. M., Böckler, A., Kanske, P., Guizard, N., Collins, D. L., & Singer, T. (2017). Structural plasticity of the social brain: differential change after socio-affective and cognitive mental training. *Science Advances*, 3(10), e1700489.

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