The British
Psychological Society

www.wileyonlinelibrary.com

Special Section Paper

The origins and nature of compassion focused therapy

Paul Gilbert*

Mental Health Research Unit, Asbourne Centre, Kingsway Hospital, Derby, UK

Compassion focused therapy (CFT) is rooted in an evolutionary, functional analysis of basic social motivational systems (e.g., to live in groups, form hierarchies and ranks, seek out sexual, partners help and share with alliances, and care for kin) and different functional emotional systems (e.g., to respond to threats, seek out resources, and for states of contentment/safeness). In addition, about 2 million years ago, (pre-)humans began to evolve a range of cognitive competencies for reasoning, reflection, anticipating, imagining, mentalizing, and creating a socially contextualized sense of self. These new competencies can cause major difficulties in the organization of (older) motivation and emotional systems. CFT suggests that our evolved brain is therefore potentially problematic because of its basic 'design,' being easily triggered into destructive behaviours and mental health problems (called 'tricky brain'). However, mammals and especially humans have also evolved motives and emotions for affiliative, caring and altruistic behaviour that can organize our brain in such a way as to significantly offset our destructive potentials. CFT therefore highlights the importance of developing people's capacity to (mindfully) access, tolerate, and direct affiliative motives and emotions, for themselves and others, and cultivate inner compassion as a way for organizing our human 'tricky brain' in prosocial and mentally healthy ways.

Practitioner points

- The human brain is highly evolved for social processing and these mechanisms are being increasingly well understood and integrated into psychotherapy.
- Among the most central processes that regulate emotion and sense of self are those linked to social roles such as status, sense of belonging and affiliation, and caring.
- Many psychological difficulties are rooted in social relational problems especially in feeling cared for by others, having a caring interest in others, and having a caring, affiliative orientation to oneself.
- Helping clients in these domains can address problems of moods, problematic behaviour and a range of shame and self-critical linked difficulties.

> Our troubles arise from the fact that we do not know what we are and cannot agree on what we want to be. The primary cause of this intellectual failure is ignorance of our origins. We did not arrive on this planet as aliens. Humanity is part of nature, a species that evolved among other species. The more closely we identify ourselves with the rest of life, the more quickly we

*Correspondence should be addressed to Paul Gilbert, Mental Health Research Unit, Kingsway Hospital, Derby DE22 3LZ, UK (email: p.gilbert@derby.ac.uk).

will be able to discover the sources of human sensibility and acquire the knowledge on which an enduring ethic, a sense of preferred direction, can be built. (E.O. Wilson, 1992, p. 332)

This article outlines the basic science and principles behind the development of compassion focused therapy (CFT). It will not discuss details of the actual therapy or evidence for the therapy (but see Gilbert, 2010, 2012). CFT grew out of the increasing recognition that:

1. The human brain is a product of evolution and can be understood in terms of Darwinian 'selection for function' (Buss, 2009; Panksepp, 2010) and thus so can many mental health problems (Gilbert, 1989, 1992; McGuire & Troisi, 1998; Nesse, 2005).

2. The human brain is particularly shaped and evolved for *social* processing and is highly choreographed through relationships making both early and current social contexts central to understanding mental health problems. Relationships based on affection and caring show many physiological and psychological beneficial effects, even on genetic expression (Cozolino, 2007, 2008, 2013; Siegel, 2012; Slavich & Cole, 2013).

3. The relationships we have with *ourselves*, especially in the forms of shame (Kim, Thibodeau, & Jorgensen, 2011) and self-criticism (Kannan & Levitt, 2013), underpin a wide range of mental health problems (Gilbert & Irons, 2005).

4. Although humans' recently evolved cognitive competencies can play a fundamental role in the triggers and maintenance of mental health problems (Beck, 1987; Beck, Emery, & Greenberg, 1985), the question is how such recently evolved competencies influence and are influenced by social motives and emotions that evolved long ago (Buss, 2009; Gilbert, 1984, 1989, 1992, 1995, 1998b, 2013; Knox, 2003; Nesse, 2005).

5. Training people in compassion can have a wide range of physiological and psychological benefits (Desbordes *et al.*, 2013; Jazaieri *et al.*, 2013; Weng *et al.*, 2013), and many therapeutic benefits (Hoffmann, Grossman, & Hinton, 2011), including for people with severe mental health difficulties (e.g., Braehler *et al.*, 2013).

Evolved candidates underpinning psychopathology are related to basic motivational systems (sex, status, attachment) that organize the mind and guide animals to seek out specific resources and avoid threats along the way. Emotions such as excitement and pleasure, or fear, anger, paranoia, and depression, provide guidance for motives and are intimately linked with them (Buss, 2009; Gilbert, 1989; Panksepp, 2010). Motivational systems evolve competencies for processing information congruent with the aims of that motive. So, for example, to eat animals have to detect and distinguish food from poison. Sexual motivations require an ability to notice, track, and process specific signals that indicate social opportunities – having a sexual desire but no idea of what will satisfy it, is hardly helpful! Attachment systems require attentional mechanisms that are sensitive to proximity to caring others and physiological systems that react to caring signals, such as holding, cuddling, and stroking or separation and their absence. Mental health problems are commonly linked to different social motivational systems and their processing heuristics (Gilbert, 1989); sometimes referred to as 'domain specificity' (Buss, 2009; Nesse, 2005). They can be linked to over and/or under activity in any of these systems, the way they co-regulate each other, blend together and have matured. For example, sexual desires can blend with affection and caring or with more dominating power-based motives (Gilbert, 1989).

Motivational systems for interpersonal relating

There are a number of functionally specific, social motive systems that are implicated in mental health problems (Buss, 2009; Gilbert, 1989; Nesse, 2005). For example:

1. *Competing and social ranking*: Resources competition involves motives and competencies to engage others in contest/conflict interactions for resources such as territory, food, sexual opportunities, and social position/social rank (Barkow, 1989; Johnson, Leedom, & Muhtadie, 2012). These will include competencies for monitoring the relative strengths/competencies of self in relation to others, and the skills and intentions of others, so that the 'weaker' disengage from, and rarely instigate conflict with, the 'stronger' (Gilbert, 2000a). Social comparison is therefore a very old disposition for processing relations bearing on domains of inferior-superior, and in humans is linked to pride-shame, assertiveness, and self-criticism (Gilbert, 1992, 2009). Competitive motives that are successful are linked to assertiveness/social confidence, and excitement with social winning/success, but when failing or losing are linked with dysphoria and anxiety (Barkow, 1989; Gilbert, 1992; Price, 1972). Defeat states are associated with depression-like states of increased threat and blocked drive emotions in humans and other animals (Gilbert, 1992, 2006; Gilbert & Allan, 1998; Sturman, 2011; Taylor, Gooding, Wood, & Tarrier, 2011) indicating 'older brain' system regulators of these mood and social-relational states (Johnson *et al.*, 2012).

   Socially constructed social hierarchies and ranks (e.g., rich vs. poor, oppression) have huge impacts on people's psychological and physical health and well-being (Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012; Sachs, 2012; Wilkinson, & Picket, 2010). It is now recognized that mental health problems can arise because of the way these rank-focused, motivational systems operate in certain contexts (Johnson *et al.*, 2012; Wilkinson, & Picket, 2010), and that it is the context as much as the 'inner motivational system' that can be problematic.

   Groups also compete with each other, which can give rise to tribal violence and intense destructive behaviours to outgroup members (Sidanius & Pratto, 2004; Van Vugt & Park, 2009). Human history is littered with episodes of intense cruelty, ethnic cleansing, and slavery. Again, it is not just the ingroup/outgroup competitive motivational system that makes this possible (Sidanius & Pratto, 2004) but the way in which social contexts can grossly over-stimulate these systems even with cultivating 'hatred to outsiders' (Gay, 1995). And in regard to feeling down rank, perceiving oneself to be part of an inferior, excluded or stigmatized group can be a source of fear, paranoia, and shame (Gilbert, 2007). Indeed, many forms of ostracism are associated with painful emotions and a range of detrimental physiological effects (Wesselmann, Williams, & Hales, 2013). So the social motives and mental mechanisms that make it possible to relate through social rank and hierarchy on the one hand, and ingroup outgroup on the other, are potential sources of human difficulties especially when activated and accentuated by social contexts and the acquisition of certain personal beliefs.

2. *Cooperation/sharing.* 'Doing things together' and coordinating actions with others (such as ants building nests or animals hunting) have huge evolutionary benefits. These evolved motives and monitoring systems are now pronounced in humans. They are experienced as desires to become a member of a group/team, with a sense of belonging and connectedness (Baumeister & Leary, 1995; Cacioppo & Patrick, 2008), with a shift from 'me-ness' to 'we-ness' (Crosier, Webster, & Dillon, 2012). The desire to be helpful and contribute to solving problems for others starts in young children

(Warneken & Tomasello, 2009). Here too, we need processing systems that can monitor our self-other interactions of what we think others will need from us. We also monitor give-and-take so as to avoid being exploited or being a cheat ourselves that could result in disadvantage or rejection. So cooperation also creates desires for fairness/justice that are the basis for some moral and ethical codes (Batson, Turk, Shaw, & Klein, 1995). Affiliative cooperation is key to friendships and friendships can break down when people feel they are taken advantage of or exploited (Bagwell & Schmidt, 2013). Humans, therefore, have an interest in, and mechanisms for, monitoring their sense of belonging and acceptance in relationships. When we feel unwanted, not belonging, or lose social signals indicative of connectedness and being valued, we can experience serious problems with a sense of threat, loneliness, anxiety and depression (Cacioppo & Patrick, 2008; Wesselmann *et al.*, 2013).

3. *Caring and nurturing*. Self-care is central to life itself. Individuals seek out food for themselves, and protect themselves from harm in addition to self-preening and cleaning. However, the caring that is especially important for humans came with the evolution of mammalian attachment – the motives and competencies for caring for others (Bowlby, 1969; Wang, 2005). These include being sensitive to signals of distress in others (e.g., infants) and taking actions to relieve that distress (Bowlby, 1969; Fogel, Melson, & Mistry, 1986); providing for the needs of the others and expressing love and caring (as to children/kin; Heard & Lake, 1988); taking an interest in the welfare of others along with prosocial (Eisenberg, 2002; Penner, Dovidio, Piliavin, & Schroeder, 2005), altruistic, and helpful behaviour (Warneken & Tomasello, 2009). Caring for *others* uses similar skills and competencies as caring for self (Gilbert, 1989).

Human caring pulls on empathic/sympathetic (Decety & Ickes, 2011; Loewenstein & Small, 2007), theory of mind, and mentalizing competencies (Fonagy, Gergely, Jurist, & Target, 2002). Caring then involves being motivated to protect, rescue, support, and help but also nurture the growth and flourishing of self and others (Fogel *et al.*, 1986). In many surveys, caring and being helpful to others are seen as the most important personal motives and values, offering sources of meaning and pleasure in one's life. Conversely, the feeling that we have nothing to contribute and that we are 'not needed by anyone' can be a source of depression (Gilbert, 1984).

The evolution of caring has also given rise to means to monitor failures in care or causing harm. If we have been (unintentionally) harmful we can experience guilt and remorse, which evolved as a 'doing-harm' avoidance system in the context of caring and is quite different to shame (Gilbert, 2007). Capacities to process and tolerate guilt (sadness, sorrow, and remorse for harm caused) and to engage in reparative actions are important for (ongoing) affiliative relationships (Gilbert, 1998a, 2007; Kim *et al.*, 2011; Tangney & Dearing, 2002) and compassion cultivation (Gilbert, 2009).

Abilities to be sensitive to the needs of others vary enormously from person to person and are linked to both genetic variation and such cognitive competencies as mentalizing, empathic processes, 'social mindfulness', and personality dimensions such as agreeableness (Van Doesum, Van Lange, & Van Lange, 2013) and caring verses and social dominance and machiavellian motives (Niemi & Young, 2013). People with Asperger spectrum difficulties can struggle with processing these types of social signals (Baron-Cohen, 2012). Problems in processing needs or distress in others can have a knock on effect to social relating in general (Liotti & Gilbert, 2010). People with psychopathic difficulties, however, may have social competencies for empathy but

lack caring motivation. Obviously, this care-giving social motivational system, with its attendant competencies for empathy, is key to compassion (Gilbert, 2009).

4. *Seeking and responding to care.* The benefits of receiving care are so great that mammals in particular have evolved motives and competencies to seek out and elicit care, and be responsive to being cared for, helped, supported, and encouraged by others. This relates to forms of attachment and interpersonal closeness (Bowlby, 1969, 1973; Cozolino, 2007, 2013; Mikulincer & Shaver, 2007), affiliation, and sense of connectedness (Cacioppo & Patrick, 2008; Wang, 2005). There is now considerable evidence that care and affection received early in life has a huge range of effects on the maturation of genetic, physiological, and psychological processes (Belsky & Pluess, 2009; Siegel, 2012; Slavich & Cole, 2013; see below). In receiving help from others a recipient can experience appreciation and gratitude in the case of material resources and also experience reassurance, feelings of safeness, and calming and relief from receiving affectionate caring in the face of distress.

Evolutionary functional analysis (EFA)

There are other motivation systems such as sexual, and other ways of describing motivation systems, but the point is that thinking about evolved motivation and emotion systems that guide processing, leads to what is called EFA – consideration of the evolved functions of different systems, how they respond to different contingencies and contexts which gives rise to their phenotypic variations (Belsky & Pluess, 2009; Buss, 2009; Confer *et al.*, 2010). In fact, most models of psychotherapy are informed by some kind of evolutionary functional epistemology. Freud coined the term 'id' and described functions of various innate drives; while Jung argued for an inherited 'collective unconscious' and described the functions of various 'meaning-making' archetypes (Ellenberger, 1970; Knox, 2003). Behaviour therapy's approach to anxiety focuses on the functions and forms of innate defensive strategies (Marks, 1987); while cognitive therapies discuss underlying evolved threat-defensive mechanisms (e.g., fight, flight, de-mobilize) that can be stimulated and regulated via cognition (e.g., Beck, 1987; Beck *et al.*, 1985).

Compassion focused therapy adapted and integrated concepts from Jung's theory of archetypes and evolutionary concepts of modularization and encapsulation with motivation theory to suggest the concept of *social mentalities* (Gilbert, 1989, 1993, 2005b). This approach distinguishes between social and non-social motivations, strategies, and their specialist processing systems. So, for example there is a big difference between interacting with something that is threatening but does not have a mind (like a tide coming in, a lack of food or a mountain climb) and so will not change according to what you do, in contrast to interacting and responding to something that does have a mind and will change moment-by-moment to how you are acting, as if in a kind of dance with you – as in predator–prey interactions.

In intraspecies social contexts, 'processing the mind of the other' is more complex than predator–prey (Baron-Cohen, 2012). A subordinate may inadvertently (e.g., with eye gaze) stimulate aggression from the dominant and must then show a submissive display to calm the dominant down. He/she must then monitor carefully the effectiveness of his/her submissive display and subsequent defensive behaviours – know the rules (Gilbert, 2000a). Submissive displays are not useful to the charging predator. A child shows distress and the parent responds to that distress in ways designed to rescue or calm the child; the parent may then continuously monitor the effectiveness of his/her caring behaviour as the child's signals change and then change his/her own behaviour as necessary. So specific

signals in one individual trigger responses in another(s) like a dance. Children with autistic spectrum difficulties may struggle to interpret facial signals and particularly eye gaze as affectionate but rather as threat thus cutting them off from the ability to process and feel safe with this social input. It was to capture this idea of *moment-by-moment change inside individuals*, *from social interactions and contexts*, that require specific monitoring with specialized processing systems that I coined the term *social mentality* (Gilbert, 1989, 2005b, 2009).

Social mentalities are rooted in innate motivation systems which, when activated, organize a range of psychological functions such as attention, emotion, cognition, and behaviour in pursuit of that motive or goal. They also prepare the individual for communicative and interactional displays and reciprocal relationships (Gilbert, 1989, 2005a, 2010). For instance, the way our attention, thinking, emotions, and behaviour are organized when we are pursuing a sexual opportunity will be very different from when we are seeking to be caring of someone, which in turn will be different again from when we are orientated towards competitive, me-first goals, or seeking vengeance on our enemies. Individuals motivated by 'social dominance' can be less caring of others and legitimise exploitive behaviours (Sidanius & Pratto, 2004). Niemi and Young (2013) found that those higher in social dominance motivation tend to be less prosocial and more authority orientated in contrast to people who are more caring orientated. So the organization of these social motivational systems (social mentalities) create major individual differences with implications for social behaviour and vulnerability to creating (in others and oneself) mental health problems. The key to a social mentality is that the self is construed in one way and 'the other' is construed according to the social mentality being pursued. So the emotions and cognitions coordinated by the mentality emerge from the actual or imagined flow (dance) of interactions between participants. CFT focuses on contextual and relational processing systems and recognizes that at times these motivation systems may be operating outside conscious awareness. Some examples are offered in Table 1.

So different social mentalities organize our minds in different ways and are linked to specialized processing systems. For example, seeing somebody cry could be pleasurable if I am motivated to hurt them but distressing if I am trying to care for them; seeing somebody joyful by a success is pleasurable if I care for them but could create envious anger if I am in a competitive mentality. So our reactions to social events depend on the context and the social mentality from which we are sensing and relating to the social world of other minds.

Problems with the social competencies of communication such as in reading facial expressions or voice tones can be problematic for people with mental health problems. Being able to accurately interpret and appropriately respond to such signals is key to how we regulate our own emotions, the emotions of others, and the relationship itself. Understanding the impact that our own social signals have in the minds of others is important for adaptive social relating. For example, if we are angry we may choose not to 'display' that in voice or face because of the impact that might have on another. This is linked to mentalizing abilities which some people struggle with (Fonagy *et al.*, 2002).

Different social mentalities also show different patterns of cognition. For example, empathy is more difficult when people feel threatened, and we feel threatened in different social roles (Liotti & Gilbert, 2010). Note too how people can feel more threatened when they are not empathic (or lack mentalizing abilities) so that other people's minds are confusing and unpredictable to them – hence the value of mentalizing training (Fonagy *et al.*, 2002). Empathy and mentalizing play very important roles in how social mentalities play out, but these competencies can also vary according to role. The person who is able to

Table 1. A brief guide to social mentalities

	Viewing or sensing the self as	Viewing or sensing the other as	Associated with conscious or unconscious threats/fears
Caring eliciting/seeking	Needing input from other(s): care, protection safeness, reassurance, stimulation, guidance	Source of: care, nurturance protection, safeness reassurance, stimuluation and guidance	Unavailable, withdrawn, withholding, exploitative threatening, harmful
Care-giving	Provider of: care, protection, safeness, reassurance, stimulation, guidance	Recipient of: care, protection safeness, reassurance, stimulation, guidance	Overwhelmed, unable to provide, threat focused, guilt
Cooperation	Of value to others, sharing, appreciating, contributing, helping	Valuing of one's contribution, sharing, reciprocating, appreciating	Cheated, unappreciated or non-reciprocating, rejecting/shamed
Competitive	Inferior–superior, more-less powerful, harmful/benevolent	Inferior-superior, more-less powerful, harmful/benevolent	Involuntary subordination, shamed, marginalization, abused
Sexual	Attractive desirable	Attractive desirable	Unattractive rejected

Note. Adapted from P. Gilbert (1992). *The Evolution of Powerlessness*. London, UK: Psychology Press.

mentalize in a competitive contest and work out what their opponent might be thinking, feeling or might do may be much less competent in a care-giving or care-receiving role (Liotti & Gilbert, 2010). Compassion too has its facilitators and inhibitors. It is easier to be compassionate to those we know, those who are like us, and those we like/love, in contrast to strangers, those who seem different to us, those we do not like or even hate. So, the way we experience relationships influence not only our motives and feelings but the way we process the needs and minds of other people (Loewenstein & Small, 2007).

Since social mentalities are focused on social roles they are core to our social identities. Moreover, the motivation within a personal identity has implications for well-being. There is evidence that different self-focused identity goals/roles (compassionate vs. self/ ego-focused goal) have very different outcomes on social relating quality (Crocker & Canevello, 2008) and on depression and anxiety (Crocker, Canevello, Breines, & Flynn, 2010). In social mentality theory, self/ego goals/roles are part of the competitive system and often focus on achieving recognition and the avoidance of shame and involuntary subordination (Gilbert *et al.*, 2007). An increase in materialism, individualism, and competitiveness at the expense of interest and concern for others may be linked to social and psychological problems especially in younger cohorts (Twenge *et al.*, 2010). People who strongly endorse material values also tend to experience less well-being, more conflict with others, engage in more social comparison, tend to be more narcissistic, and are less intrinsically motivated (Kasser, 2002). Therapy can sometimes result in different patterns of motives emerging – indeed the focus on compassionate self-training partly seeks to do this. CFT suggests that motivational patterns linked to a personal identity have implications for well-being.

The focus on social motivations links with other motivational theories. For example, some years ago Deci and Ryan (1985; Ryan & Deci, 2000) brought together themes on motivation and called it self-determination theory. They focused on three primary motives of competence, autonomy and relatedness and distinguished between *intrinsic and extrinsic* motivation. These focus on the process of motivation not the content but content (i.e., if it is caring, competitive, cooperative, or sexual) will influence which competencies for processing are utilized.

Intrinsic motivation is linked to what is inherently rewarding and pleasurable to do, whereas extrinsic relates to the instrumental value of actions – so the task itself may not be pleasant to do but some future outcome might be, or avoid punishment/harm. These dimensions clearly interact with social mentalities. For example, care giving that is felt to be obligatory in some way, or when the needs of the other exceeds the resources one wants to put into caring, or seems to be beyond one's competence, or when there may be negative consequences for not caring enough (e.g., criticism from others) can be stressful and detrimental to health and lay the basis for compassion fatigue (Vitaliano, Zhang, & Scanlan, 2003).

Autonomy overlaps with the evolutionary concept of voluntary and involuntary actions and engagements (Gilbert, 1992). Being hugged and loved by somebody you trust or like is very different from somebody you do not, and caring for somebody you like is different to caring for somebody you do not. Submitting and recognizing one's inferior position to someone who is liked and respected, or even a loved God, is very different to involuntary subordination which is fearful and resentful. So, these dimensions are very important in an analysis of social roles. This is why the way in which one chooses and identifies with social roles can be important. For instance, if the role is a desired role, freely chosen, something one wants to become (e.g., a more compassionate self) combined with the feeling that one has the ability or competence to perform in the role, then this will have a different impact on behaviour, emotion and cognition than if one feels forced to (or ought) adopt a role for which one feels ill-prepared. So, it is important to distinguish compassion as a freely chosen desire rather than a should or ought, and without punishment (shame) for lapses (Gilbert & Choden, 2013). Compassion grows where one has an insight into the nature of suffering, the competencies and value of compassion, with opportunities to practice them and gain confidence in using them.

In CFT, compassion is seen to emerge from particular, *evolved social motivation systems* and how they get played out and developed/cultivated in *actual interactions* (Gilbert, 1989, 2000a,b, 2009; Gilbert & Choden, 2013). These interactions can be with other people, but they can also be self-to-self. So to summarize then, part of the basis for CFT is rooted in:

1. The evolution of the motivational, emotional, behavioural, and cognitive competencies which enable us to notice, engage with, and work to address the distress and needs of self and others.
2. The evolution of the motivational, emotional, behavioural, and cognitive competencies underpinning the seeking of and responding to caring, helping, sharing, and kindness.

Emotion systems and compassion

Emotions are of course different to motives. They are ancient mechanisms that provide moment-by-moment feedback information for individuals in relationship to their

motive-environment interactions, and provide the impetus for motivation and action; emotions make things matter (Izard, 2002; Panksepp, 2010). Emotions have major impacts in the body in a way that cognitions alone cannot (Haidt, 2001). Their impacts can be non-conscious and they can conflict (e.g., people can be fearful of their anger, and angry/contemptuous of their anxiety/fear). They are what bring people into therapy, are at the root of the 'experience of suffering', and in some approaches are the focus for therapy (Greenberg, Rice, & Elliott, 1993). Many therapies recognize that it is the avoidance of feeling and experiencing of emotions (fear, anger, sadness, or even love and happiness) called experiential avoidance that contributes greatly to mental health problems (Hayes, Follette, & Linehan, 2004). Although many therapies highlight the importance of (the therapeutic) relationships in change process, CFT highlights the abilities to facilitate and experience *affiliative emotions* (via compassion), because these have their own physiological profiles that facilitate the regulation of feared emotions and often provide the courage to engage with feared emotions (see below).

Emotions are of course more than individual experiences because they also function as social communications, conveying information about one's values, social intentions, and orientation towards others in terms of safeness, threat and needs (Keltner & Haidt, 1999). So, emotions influence not only the behaviour of the experiencer but also those who perceive or are recipients of emotions. Thus, emotions are part of the dance of social communication that provide the basis for the co-regulation of each other.

CFT takes an evolutionary functional view to emotion – especially the affiliative emotions and their competencies. CFT focuses on three main evolved functions of emotions: (1) alert to threats and activate defensive strategies; (2) provide information on the availability of resources and rewards and activate seeking-engagement strategies; and (3) provide information on safeness, allow for rest and digest and relative non-action in the form of contentment and openness. The way these three systems regulate each other and blend are central in CFT. So, CFT uses a three emotion-systems approach supported by a review of positive and affiliative emotions by Depue and Morrone-Strupinsky (2005) and studies of threat-based emotions (LeDoux, 1998). There are of course more complex models of emotion (e.g, Panksepp, 2010) but this tripartite system is easily understood by clients who readily identify with it, and helps to guide the insight into the value of compassion. We call it the three circle model of emotion – but recognize it is a simplification for what are complex processes of emotion (see Panksepp, 2010). Figure 1 offers a simple depiction of them.

The threat-protection system

This is an emotion regulation system that provides abilities to detect and respond to threat appropriately (LeDoux, 1998). The threat system emotions of anger, anxiety and disgust (sometimes called negative emotions) is fairly well understood both in terms of its neurophysiology and learning choreographies (such a classical conditioning, operant, and social contextual learning; Panksepp, 2010). It is now recognized that the threat system is our dominant system and creates what is sometimes called the 'negativity bias'; that is, we pay more attention to, process, and remember more easily, negative than positive events – and there are evolutionary reasons for doing so (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Threat emotions can also arise when a motive is blocked. For example, children are highly motivated to stay in close proximity to their attachment objects but if access is blocked the child is threatened and shows distress (or what is called protest-despair). It is common for people to feel anticipatory anxiety in contexts where
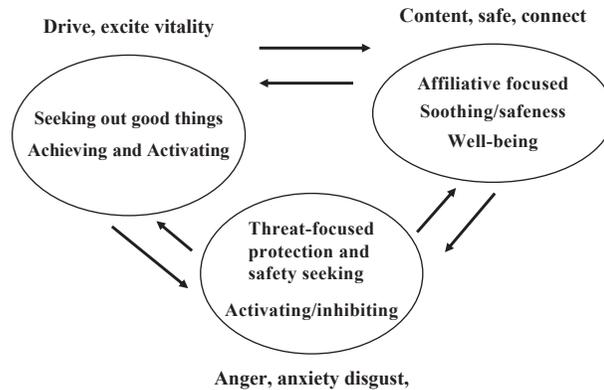
Figure 1. Three types of affect regulation system. From P. Gilbert (2009). *The compassionate mind.* With kind permission from Constable Robinson.

they feel they may not succeed at something they are motivated to succeed at. Humans can be threatened by things outside of themselves obviously but also things internal to themselves such as their own anger, anxiety (getting anxious about getting anxious), or intrusive fantasies. Aversive emotions and moods can also arise after a threat has passed, when the focus is on the loss or harm that has been done. Note too that threat behaviours can be ones of activation as in fight and flight, but also ones of deactivation as in defeat, helplessness and despair (Gilbert, 1992; 2000a).

Since threat emotions are what most people present with and seek help for, therapies commonly explore the origins and meanings linked to these emotions, with interventions involving some kind of insight, cognitive reappraisal, exposure, desensitization, and/or skills training (e.g., social skills). Hence, most therapies tend to work fairly directly with the threat system itself (Gilbert, 1993). However, in compassion work, we often need to work with other 'positive' affect systems that regulate threat.

The positive affects of seeking and acquiring
What is less commonly recognized is that there *are different functional systems for positive* emotions with almost diametrically opposed functions! Moreover, they play crucial roles in threat appraisal and coping. Depue and Morrone-Strupinsky (2005) pointed out that one form of positive emotion is stimulating and activating – joy, fun, excitement, and pleasure. A blend of threat with drive and sense of control can offer the buzz of excitement (sky diving). Generally, however, activating positive emotions are linked to forms of seeking out and acquiring resources (rewards and skills) that are conducive to prosperity and well-being. It is linked to the 'broaden and build' process suggested by Fredrickson (1998). This system is also involved in *competitive* drives (and social mentalities), seeking dominance and social position. It is linked to the *sympathetic* nervous system. When environmental contingencies are excessive, the activation of this positive emotion system can also be excessive and even hypomanic. So, for example, winning a £10 lottery will have a very different physiological effect than winning a £100,000,000! The point here is that individuals (even mindful ones) would struggle to control that dopaminergic bodily response and find it difficult to sleep for a few days and not have intrusive thoughts and flashes of excitement about being very very rich! The quality and extent of the resources obtained has a major impact on the degree of activation of positive emotion. Cognitive therapists point out that personal meaning plays a role here

because if you were already a billionaire you probably would not get so hypomanic, and if you were paranoid, and felt that now people were coming to kill you for your money, again you would not get this activation.

Some people, however, are frightened of positive feeling because they feel that if they are happy or something good happens to them, then something bad is bound to happen afterwards or as a result (Gilbert *et al.*, 2012; Joshanloo, 2013). In many cases, as children some threat or punishment occurred in the context of 'enjoying' themselves which creates a classically conditioned aversive memory to positive emotion. So, generating this type of positive emotion is not always as straightforward as it may seem. Behavioural processes of desensitization and exposure may be important before some people can access or stay with positive emotional states of enjoyment and excitement.

There is increasing concern that Western (capitalistic have more) societies are over stimulating 'seeking', 'wanting' 'me focused' competitiveness and general sympathetic activation (Pani, 2000) possibly at the expense of affiliative and community ways of living (Twenge *et al.*, 2010). An overreliance on achievement and acquiring can increase vulnerability to certain states of depression, linked to problems in the drive system, especially when motives/goals get blocked or people feel defeated in being able to reach their goals, which create feelings of exhaustion, fatigue, and hopelessness – and the loss of drive (Taylor *et al.*, 2011).

Positive affects of contentment, safeness, peacefulness, and affiliation
There is a whole suite of emotions which are not based on activation (threat or doing and achieving) but on calming and soothing, feeling safe, peaceful, and content which has been largely ignored in clinical psychology, possibly because it has been thought these feelings are just the absence of threat. However, Depue and Morrone-Strupinsky (2005) show there is a very different, specific positive affect system which is linked to calming, resting and contentment – a state of quiescence where one is not under threat nor in a seeking or achieving state of mind, representing a calming of both drive and threat systems. Once a goal has been obtained (e.g., food has been acquired) and the animal is not under threat, drive systems need to be 'turned off' to produce quiescence, resting, and balanced energy expenditure. This system is linked to endorphins and the activation of the *parasympathetic nervous* system, which is sometimes called a 'rest and digest' system (Porges, 2007). Indeed, Depue and Morrone-Strupinsky (2005) suggest that our contentment system can be regarded as a *specialized affect regulation system* with its own behaviour regulators, physiological infrastructures, and range of effects on other systems such as attention and reflections.

So non-striving, accepting, being-in-the-moment can be associated with a sense of contented well-being that is different from the relaxation response. It is possible that 'mindfulness' accesses this system by putting people into what is called 'being mode' rather than 'doing mode'. Thus, mindfulness may relate to reducing activity in the default mode (Brewer *et al.*, 2011) changing the sympathetic-parasympathetic balance (i.e., improving heart rate variability; Krygier *et al.*, 2013; see also Mankus, Aldao, Kerns, Mayville, & Mennin, 2013), both of which may link to this soothing-contentment affect system. Indeed, meditators talk about feeling more connected, less driven, less threatened, and more contented and at peace with themselves following meditation, especially over longer periods such as after a retreat.

Importantly, there are a number of clients who can have difficulties with feelings of contentment, safeness and compassion (Gilbert, McEwan, Matos, & Rivis, 2011). For

example, when you teach them mindfulness or mindful breathing, to enable slowing and calming, they become frightened. The feeling of slowing down, triggers aversive memories. One client described feeling 'safe and content' as lowering one's guard (vigilance). She gave an example of how she remembers as a child simply being chilled out, watching the television and then her (alcoholic) mother would fly into a rage over something and beat her. 'You must never feel safe or settled, because that is when you get hurt'. So using classical conditioning concepts, we can see that these kinds of emotional states can actually have traumatic histories and memories associated with them. Other examples can be where children have been resting in their rooms and the parent has come and abused them and then left them alone in their fear. So working with fear of compassion and fear of safeness are major issues for some people (Gilbert *et al*., 2011, 2012; Pauley & McPherson, 2010) and a central focus for CFT (Gilbert, 2010).

Human brains are 'tricky': Links of cognition, emotion, and motivation

Compassion focused therapy uses the concept of 'tricky brain' to depict the fact that our evolved brains come with a lot of trade-offs, compromises and glitches – they are amazingly complex and do amazing things but are not 'well designed' (Gilbert, 1998b, 2002; Nesse, 2005). One major trade-off that causes serious human problems emerged about 2 million years ago as humans evolved complex (intelligent) cognitive capacities such as imagining, anticipating, and ruminating, and an objective sense of self. We got smart, learnt to speak and use symbols and abstractions and, could solve many adaptive problems by 'thinking of solutions' and built technologies. A down side though is that we still have old brain emotions and motives. Moreover, we can stimulate these systems with our new cognitive processing capacities and distort them for good or ill. For example, a zebra running away from a lion will settle down quite quickly after it has escaped, whereas a human can remain traumatized by imagining what *might* have happened if they had got caught (imagining being eaten alive and dying in agony), what might happen tomorrow if there are two lions, the 'what will happen if…' thinking and so on. Our capacity for such 'reflecting' can stimulate threat emotions and maintain these physiological systems in a state of activation in the body – giving rise to both mental health and physical health problems (Sapolsky, 1994).

Our intelligence can be used for very (old brain 'groupism') destructive goals such as building nuclear or chemical weapons. We can now purposely, with much thought and planning, and with great intent and purposeful cruelty, spread terror (as in crucifixions, forms of torture, and death camps). We are fascinated and enjoy violence and cruelty in TV entertainments. We have compassion motivation systems but also harm intending ones that can use our new brain smartness to tragic effects. But we can use our intelligence in the service of compassionate motives/goals and learn to override our destructive and self-focused motives and be helpful to others (Loewenstein & Small, 2007).

It is also the case that our evolved capacity to create an objective sense of self, that we can observe and judge, gives rise to problems of narcissism (an elevated view of the self at the expense of others), hypochondriasis, types of panic and fear of dying, along with shame, self-criticism, and self-harm. The latter are linked to many mental health problems because they are regularly stimulating threat systems (Gilbert, 2009). Indeed, self-criticism is a powerful stimulator of threat processing in the brain (Longe *et al.*, 2010). So, the human mind is capable of generating complex and dysfunctional loops between motives, emotions and cognition. This is not our fault, and is something we

spend a lot of time discussing with clients as part of de-shaming and depersonalizing interventions. So, if we are not mindful of what goes on in our minds, and just allow our attention and actions to be caught up in these loops, by whatever emotion or motivation gets triggered, we can do much harm to our mental health not to mention others and the world we live in.

The cognitive behavioural therapies that focus on processes of reasoning and meta-cognition have done much to advance interventions, but they were always based on useful heuristics rather than a science of mind. Today however clinical psychology can be much clearer about the way in which recently evolved cognitive systems interact with (older) motives and emotions and that often we need to work with motive and emotion systems directly (Gilbert, 1992; Greenberg, *et al.*, 1993 Haidt, 2001). In addition, our recently evolved, cognitive systems can be quite specialized in that mentalizing is different from how we do logical and mathematical thinking; different types of cognitive system may require different types of intervention.

Shaped by social contexts

We are also highly socially contextualized and choreographed with a sense of self that we never chose. We advise clients that 'if I had been kidnapped as a three-day old baby into a violent drug gang and brought up there, then this version of Paul Gilbert, as a therapist would certainly not exist. In its place would be a very different version of me – a potentially aggressive gang member who would have little empathy perhaps'. So, we are all partly created by our genes, the functional nature of our evolved brain, and the social circumstances that choreographed our brains and genetic expressions (Belsky & Pluess, 2009; Slavich & Cole, 2013). We chose none of this! So, these processes cannot be approached from just a cognitive position but need to be understood in terms of how the brain evolved to function in certain ways, not always helpfully, and is highly sensitive to maturing 'different versions of itself' according to the social niche in which it is embedded (Gilbert & Choden, 2013; Siegel, 2012). Our sense of self is a genetic and social construction. Many clients find these insights a revelation and validating – and this information can be delivered even in short interventions on acute psychiatric units (see Heriot-Maitland *et al.*, 2014). It begins the process of creating a depersonalizing and a 'common humanity' approach to difficulties.

Compassion: The caring, helping, and sharing social mentalities

Compassion focused therapy utilizes an integrated approach to human psychology where compassion is underpinned by core motivation and emotion systems and evolved cognitive competencies. So CFT recognizes that humans have great potentials for being helpful but also for being very destructive to ourselves and others. Looking at the history of warfare, cruelty, and torture we are potentially a very nasty species (Gilbert, 2005a). Alongside our evolved motives that underpin compassion are one's that underpin selfishness, addiction, greed, tribalism, violence, depression, and suicide. We have a multi-mind that is not always easy to coordinate or regulate. As the Buddha pointed out thousands of years ago mindful compassion gives us both insight into our minds and a major orientation (basic motivation system) that will help to organize this tricky brain (Gilbert & Choden, 2013).

Compassion is linked to motives, emotions, and abilities/competencies to be supportive, understanding, kind, and helpful to others (Davidson & Harrington, 2002; Weng *et al.*, 2013; www.compassion-training.org), and to be socially mindful (which is different from general mindfulness; Van Doesum *et al.*, 2013). With roots in the evolution of caring and altruism, compassion has been given various definitions. For example, the Buddhist scholar Geshe Thupten Jinpa who developed the Stanford *compassion cultivation training* (for which there is growing evidence; Jazaieri *et al.*, 2013) defined compassion in a fairly typical Buddhist way as:

> …a multidimensional process comprised of four key components: (1) an awareness of suffering (cognitive/empathic awareness), (2) sympathetic concern related to being emotionally moved by suffering (affective component), (3) a wish to see the relief of that suffering (intention), and (4) a responsiveness or readiness to help relieve that suffering (motivational; Jazaieri *et al.*, 2013).

Indeed, Buddhist concepts of compassion are being increasingly integrated into western psychotherapy (Germer & Siegel, 2012). Although compassion has obvious overlaps with concepts like kindness (Phillips & Taylor, 2009) they are slightly different (Gilbert & Choden, 2013). In CFT, we also use a Buddhist informed definition derived from the writings of the Dalai Lama and others (1995; see also Tsering, 2008): Compassion is: 'a sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it'.

Now this definition points to *two different* mindsets or 'psychologies' that link easily with Jinpa's and related definitions (Gilbert & Choden, 2013). The first involves the motives, competencies, and preparedness to notice, engage, turn towards, tolerate and make sense of suffering – rather than avoid, deny, be overwhelmed, or dissociate from suffering in self and others. The second mindset involves the skills and wisdom of knowing (or finding out) what to do about it (Germer & Siegel, 2012). These competencies are much more action focused. For example, wanting to be a good psychologist to help depressed people would be the first mindset but then ensuring one is sufficiently well trained and skilled would be the second. Good intentions are not enough. If you see somebody fall into a fast flowing river you may jump in to save them only to remember halfway through your jump you cannot swim! So, both of these mindsets or 'psychologies' are integral to CFT.

Compassion, as a social mentality, can 'flow' in three directions. First, there is the *compassion we can feel for another or others*; then, there is the compassion *we can feel coming from others to ourselves*, and then there is the compassion we can direct to ourselves (*self-compassion*). Each of these can be a focus in CFT.

Caring and nurturing

The key elements of caring and nurturance that became the basis for compassion in CFT were originally taken from Fogel *et al.*'s (1986) model of nurturance, rather than a Buddhist one (see Gilbert, 1989). They defined the core elements of care-nurturance as follows: '… the provision of guidance, protection, and care for the purpose of fostering developmental change congruent with the expected potential for change of the object of nurturance' (p. 55). Here, caring is not just focused on suffering but also is supporting and encouraging of developmental change for the good of the other. From an evolutionary point of view, nurturing is about fostering growth. Note that it is not specifically

attachment focused. Indeed, we can show care for individuals we may not be attached to or even wish to be attached to. Moreover, care, defined this way, can be directed at animals and plants. Indeed, it is the recently evolved cognitive ability to recognize what will relieve suffering *and* promote flourishing that extends our caring abilities beyond a narrow, limited, modularized focus. For example, chimpanzees will care for their infants but they cannot use an abstract concept of caring to (say) develop agriculture or husbandry. The evolved cognitive abilities to *understand the principles* of needs-caring and be able to apply these principles to many domains is profound (Loewenstein & Small, 2007). It breaks the human mind out of being a modularized mind and allows much wider domains for processing – what Mithen (1996) called the evolution of the de-modularized mind. These human competencies are key to CFT.

Evidence also suggests that a more expansive form of caring arose in the human line about 1 million years ago. From this time, the fossil record suggests that humans were surviving who were quite ill or injured and they could only have done that if they were being looked after, nurtured, and cared for. No other animal cares for their old and sick like this (Spinks, Rutherford, & Needham, 2010). The lavish attention to some burial process with possessions or jewellery suggests concern for others that extends into some kind of future 'other' life. This suggests the development of both the motivation to provide care, the cognitive competencies to understand what the other needs, and be able to think about the nature of their lives in a future imaginary, unseen world.

Fogel *et al.* (1986) went on to suggest that nurturance/caring involves a number of core qualities that begins with (1) the *motivation* to care, (2) attuned attention and *awareness* of the need to be nurturing that requires (3) an *understanding of* the nature of the difficulty and what is needed to be nurturing that leads to (4) *expression* of nurturing feelings/actions, and (5) an ability to match nurturing with the *feedback* from the impact on the other. This last aspect is of course the ability to change almost moment-by-moment according to how one's nurturing is going – as in a social mentality.

Neuroscience has also started to reveal some deep brain systems involved in caring behaviour. Simon-Thomas *et al.* (2012) conducted an fMRI study to explore the difference in compassion versus pride activation. They found that:

> Compassion induction was associated with activation in the midbrain periaqueductal gray (PAG), a region that is activated during pain and the perception of others pain, and that has been implicated in parental nurturance behaviours. Pride induction engaged the posterior medial cortex, a region that has been associated with self-referent processing. (p. 635)

These findings are important because one will be activating quite different brain systems if one is trying to help self-critical people take pride in their achievements rather than being compassionate to their pain or shame. Although it should not be an either-or, Neff and her colleagues (Neff, Hsieh, & Dejitterat, 2005; Neff & Vonk, 2009) have shown that focusing on self-esteem and striving for achievement has its own problems when trying to cope with setbacks and failure, whereas self-compassion helps people cope with setbacks and failure in adaptive ways. Suppose you succeed today but fail tomorrow again? Self-compassion helps us with the setbacks failures and difficult times (Neff, 2011).

Attachment

Running alongside the psychology of caring is the psychology of attachment. Attachment theory provided an explanation for the evolution of parent–child relationships as central

to the dynamic of certain forms of caring (Bowlby, 1969, 1973; Mikulincer & Shaver, 2007). However, caring was not particularly the focus of attachment theory (Heard & Lake, 1988), rather it was proximity seeking and the provision of a *secure/safe base* and *safe haven* that supports the infant's survival and development. Hrdy (2009) has raised the possibility that where humans gained an evolutionary advantage was with the process of extended caring, whereby aunts and grandparents came to play a role in the child's care and protection. Most primate mothers will not allow others to hold her infant early in life, whereas humans even encourage it from supportive others. This means that human infants are interacting with 'many minds' from an early age, which may have been a spur for intersubjectivity (see below). There is evidence that the care and affection we receive in childhood not only influences genetic expression and the kinds of brain we mature (Cozolino, 2007, 2013) but lays the foundation for being caring and compassionate as an adult (Gillath, Shaver, & Mikulincer, 2005).

Prosocial behaviour.   As central and important as attachment theory is to the evolution of capacities to understand the needs of others, with a wish to satisfy them and to nurture, compassion is not solely located within attachment mechanisms. Indeed, 'helping behaviour' has a wide focus, linked to the studies of prosocial behaviour (Bierhoff, 2005; Penner *et al.*, 2005). How children learn to share and take an interest in each other and regulate potentially selfish-competitive or hostile motives (Eisenberg, 2002) is important to the development of compassion abilities (Penner *et al.*, 2005). From quite a young age children are able to understand the goals others are pursuing and, if they are having difficulties in reaching those goals, will try to offer help. So for example, around 18 months, a child who sees an adult drop something they want, can run over, and pick it up and hand it to them. It is also apparent that children smile and enjoy the act of helping, cooperating, and sharing (see Warneken & Tomasello, 2009; and for a good demonstration see http://www.youtube.com/watch?v=Z-eU5xZW7cU). So, caring and helping behaviour are not just evolving within the parental role but across various domains of social relating. For example, the evolution of altruism maybe encouraged by it being seen as a sexually attractive trait in a long-term mate or for a friendship (Goetz, Keltner, & Simon-Thomas, 2010).

From an evolutionary point of view *creating happiness for others* is often rewarding or, as noted earlier, 'it is rewarding to be rewarding to others' (Gilbert, 1984). In fact, Gilbert (1984) suggested one of the issues in depression is that people do not feel rewarding or of 'any use' to others, and that one anti-depressant process could be helping people feel of value by helping them make contributions that others will appreciate. In fact, there is increasing evidence that doing kind things for others and focusing on being helpful to others can promote happiness and reduce mild depression (Lyubomirsky, 2007). In addition, practising generating feelings of kindness (loving kindness meditations) for others can change brain systems (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008).

Prosocial development in children, and deriving enjoyment from helping others, goes through stages for empathy and theory of mind. Prosocial behaviour emerges when children have an opportunity to practice, have role models, are rewarded for practice and guided in their practice of caring, sharing, and helping (Eisenberg, 2002). Also important is how children come to understand their own emotions, because that is important in how they understand the emotions of others. So, compassion emerges from a complex integration of evolved motives, emotions, and competencies for parental caring of infants,

and the evolution of helping and prosocial behaviour where even young children can take an interest in the goals and well-being of others.

The competencies and motivations for caring are also known to have a specific physiology. For example, oxytocin and vasopressin play important roles in attachment and the degree to which people try to be helpful to others and are open to care, for example, are trusting (Carter, 1998; Insel, 2010). Particularly important in the evolution of caring behaviours was the adaptation of the myelinated parasympathetic nervous system (Porges, 2007). This created changes in the regulation of the fight-flight responses such that individuals could not only stay in close proximity, but that such closeness could be calming. These physiological systems play fundamental roles in affiliative and caring behaviour (Carter, 1998; Insel, 2010; see Andrew, Braehler & Macbeth, this edition). However, again the social mentality in which oxytocin is operating is important because oxytocin promotes affiliation only to particular targets such as kin or in-group members. Oxytocin can actually increase aggression of a mother to potential threats to her infant and increase aggression to individuals seen as outgroup or outsiders (De Dreu, Greer, Van Kleef, Shalvi, & Handgraaf, 2011). The *specific social mentality* and functional context is central for how a neurophysiological system actually works. Oxytocin is not a generalized 'be nice to everybody' system – but much depends on how self-other is constructed. Indeed, even in relating to oneself oxytocin does not always produce positive effects – especially if one has a critical or hostile relationship with oneself (Rockliff *et al.*, 2011; see Gumley *et al.*, this edition).

Being cared for – The other aspect of compassion focused therapy

Being able to generate compassion with the two 'psychologies' outlined above is only part of the story of CFT particularly when it comes to self-compassion. For therapy, much depends upon how people respond to and are changed by being recipients of compassion. Again, it helps to have evolution-informed insights into how caring evolved to impact on the targets of caring.

Contentment, caring, and safeness

The psychology of affiliation involves both activating emotions (the joys of love and sharing) but also calming and soothing ones. In fact, there is good evidence that the emotion system that underpins calming and contentment, played a significant role in the evolution of attachment itself, especially the way a parent is able to calm a distressed child and create a safe haven (Bell, 2001). Porges (2007) has written extensively about the way in which adaptations to the autonomic nervous system (especially the myelinated vagel nerve of the parasympathetic nervous system) arose such that individuals could not only get close to each other, without stimulating their fight-flight systems but also experienced each other as rewarding, soothing, and physiologically regulating, and thus triggered approach behaviour.

Importantly, oxytocin along with the endorphins play central roles both in care-giving *and* care receiving. Being the recipient of certain types of care increases oxytocin and has calming effects in the amygdala. Oxytocin helps us feel safe and offers a sense of well-being (Carter, 1998; Insel, 2010). Caring touch releases endorphins and oxytocin, stimulates the soothing properties of the parasympathetic nervous system (Porges, 2007), and lowers cortisol (Field, 2000). Some 50 years ago, Harry Harlow showed that when

young monkeys are frightened they preferred to cling to a terry cloth surrogate mother rather than a wire one which provided milk (for a review, see Harlow & Mears, 1979). So, mammals are highly adapted for physical contact and to be emotionally regulated through touch, which stimulates soothing (Dunbar, 2010).

Field (2000) reviewed the evidence on the beneficial effects of holding, stroking, and touching during development showing that even laboratory rats can grow up calmer if they are regularly stroked (see also Slavich & Cole, 2013). So, physical contact creates a particular type of phenotypic development. As Sapolsky (1994) observed:

> Touch is one of the central experiences of an infant, whether rodent, primate, or human. We readily think of stressors as consisting of various unpleasant things that can be done to an organism. Sometimes a stressor can be the *failure* to provide something to an organism, and the absence of touch is seemingly one of the most marked of developmental stressors that we can suffer. (p. 92)

There is now evidence that these physical behaviours can also influence genes and genetic expression through a process called DNA methylation and can have intergeneration effects (Bick *et al.*, 2012; Slavich & Cole, 2013; for an easy introduction, see Cozolino, 2013). Many people with mental health problems often talk about a lack of physical affection in their early and current environments.[1] So, a key process in the caring of a child is the way in which the parent is able to regulate threat and drive by stimulating soothing, through touch, stroking, cuddling, voice tones, and facial expressions which is one reason we focus on these in CFT.

Indeed, with the passage of time these become more symbolic and we can feel soothed not only through physical touch but through the way people talk to us, their facial expressions and voice tones. Indeed, we use the language of 'I was touched by what you said to me'. 'I was touched by your gift'. When we feel that others are reaching out to be helpful or kind we sometimes use the word 'touched'. In terms of the three circles of emotion regulation then, the experience of calming, soothing, and peaceful contentment can be induced through certain types of care from a caring other, especially, but not only, the parent.

Attachment

The extraordinary importance of the evolution of caring for the psychological development of a child was articulated by the British psychiatrist John Bowlby, who called it attachment theory (Bowlby, 1969, 1973, 1980). Bowlby was particularly concerned with the behavioural aspects of care and ways a helpless infant copes with threat. This linked to three main functions. The first is the need for the infant to *seek proximity* to a caring other. Second is the ability of the caring other to act as a *safe haven* who regulates threat exposure for the infant, keeping the infant out of harms way, chasing off predators or picking up the infant and bringing it back to stay close; being soothing of the infant's distress and being a provider when needed (e.g., with food or warmth or cleaning). So, when the child is distressed, because of hunger, cold, pain, or threat – all of these can be down regulated with the care of another – in

---

[1] *Based on the evidence for the role of touch in stress regulation, particularly in infancy and childhood, clinical psychology needs to raise serious concerns about the increasing the lack of 'touching, cuddling, or holding' for children in schools especially when they are stressed.*

this case the parent; the parent is a powerful physiological regulator of the child (Cozolino, 2007, 2013). So, the parent is a source of needs satisfaction, stress reduction and *is able to put the infant into states of better parasympathetic balance and contentment.* From these states, the child is able to rest and sleep. Clearly then, the caring input of the parent is stimulating the infant's soothing system that then down regulates the threat system. These experiences significantly effect brain maturation and of course with classical conditioning are the basis of emotional memories for soothing.

Bowlby also talked about the importance of a *safe/secure base*, from which the child gains the confidence to go out, play and explore, develop and acquire the skills for independence. Fenney and Thrush (2010) explored how a secure base operates in adult relationships with the functions of encouraging exploratory behaviour, facilitating confidence, and self-development. These are more drive functions, facilitating behaviours for seeking and acquiring skills and resources and facing challenges. But importantly, these are best developed in the context of safeness. For these functions, Fenney and Thrush suggest that caring others should be available, non-interfering and encourage and reward efforts. In terms of CFT, these are important processes to facilitate in therapists and are central in the understanding of the therapeutic relationship.

A secure base also facilitates intersubjectivity which enables us to share our thoughts and feelings (Trevarthen & Aitken, 2001). For example, the child does not look at the pointing finger but to what is being pointed at; that is to say they can share 'perspectives' and a mutual taking of interest in the 'pointed at'. This also creates the capacity for 'we-ness' a sharing of experience rather than just 'me-ness'. This attunement of minds, and the experience of safeness in the attuning of minds, is fundamental to our abilities to feel safe in the world in general. For example, if I am frightened of the one who is pointing then most of my attention is on them as a 'feared object' not 'the pointed to'. So sharing requires some degree of mutual safeness.

Cortina and Liotti (2010) explore the links between attachment, intersubjectivity and exploration suggesting that 'attachment is about safety and protection, intersubjectivity is about sharing and social understanding', but as noted they are interdependent in the sense that fear will probably reduce the capacity for intersubjectivity. Intersubjectivity is crucial to the sophisticated development of social mentalities and the way we begin to experience living in an interpersonal world of other minds. It enables us to become aware that we are not only living in the material world and one of potential predators but also living in a world of minds that can mentalize 'our minds' and will judge, reject or seek to relate to us in specific social (mentality) ways. So, we have to be able to mentalize 'their mentalizing of us' in order to pursue our social life goals.

Seeing into our own minds

Feeling cared for, supported and understood also helps us to understand our own minds especially our emotions and shapes our motives (Cortina & Liotti, 2010; Trevarthen & Aitken, 2001). So linked to intersubjectivity is how we come to understand our own minds, motives, and emotions and use that insight to understand others. We are members of the same species with the same basic minds, desires, needs, and fears – others are not unfathomable aliens to us (Nickerson, 1999). And it is not just our minds but also the nature of our being-in-the-world that we share; that we are all gene-created and socially choreographed. We are born, flourish for a while, are

susceptible to numerous diseases and injuries then decay and die – none of which we would actually choose. But the potential for seeing others like us also opens the potential for making quite significant (projection) errors too (Nickerson, 1999). Compassionate care therefore requires us to have some capacity for empathy and mentalizing which enables us to move outside an egocentric view and see the *difference* between self and 'the other'. So empathy becomes part of 'guided discovery' – of becoming familiar with the unfamiliar, by making deliberate efforts to imagine being the other and seeing they are (in some things) not 'just like me'. If no one I have deeply loved has died, could I understand the deep pains of grief and how it can take over one's whole body? How recipients experience the therapist's empathetic efforts at creating an open, empathically exploratory, non-judgemental relationship may influence how open or receptive they are to compassion.

So, psychological therapies can be partly about a maturation process and ways of stimulating peoples' self-identity motives and competencies by providing them evolutionary salient inputs. For example, attachment theory has been used as a basis to understand the psychological maturation that takes place in therapy and guide therapeutic inputs (Wallin, 2007). Indeed, therapists from different schools are now integrating attachment-based research into their therapy process partly because of our increasing awareness of the importance of affiliative and social processes underpinning mental health (Danquah & Berry, 2013). Mentalizing-type therapies are not about trying to correct errors in thinking or maladaptive schema, or tone down rumination, but involve *maturing* and cultivating important competencies for reflection, perspective taking, affect regulation and social navigation (Fonagy *et al.*, 2002). CFT takes the same basic approach of suggesting that some forms of suffering arise because individuals have not had an opportunity to develop or mature certain competencies which are crucial for affiliative relating.

Positive self in the mind of the other and shame

Living a world of other minds as we do is fuelled by the desire to live in those minds in a way they will be helpful and supportive to us. So perhaps one of the most important is to *experience ourselves positively in the mind of the other*; that is as 'a loved, valued and wanted individual'. Kohut (1977) called this *mirroring* and referred to it as a 'gleam in the mother's eye' (for a comparison of Kohut and Bowlby, see Gilbert, 1992, chap. 10). In addition, mirroring is linked to our desires to display to others, become actors, tell jokes and stories, share information such that we are objects for positive evaluation in their minds. Stimulating positive emotions in the minds of others is clearly reflected in non-verbal communication (the smiles and facial expressions) which stimulates positive emotion in us.

In fact, creating positive emotions in the minds of others about the self has enormous payoffs. If we are liked, then people will be kind and supportive to us (rather than rejecting or ignoring), form advantageous relationships with us, which in turn stimulates positive physiological change in us, including the immune system (Cacioppo & Patrick, 2008). But to some extent this is also a competitive role. The idea that human competition (and social ranking) became focused on influencing the minds of others positively in one's favour has been around for a long time reaching back to George Herbert Mead's concepts of the *looking glass self* in 1902. It was further developed by Barkow (1989) in his discussion of *competing for prestige and reputation* and in Gilbert's concept of social attentional holding power (Gilbert, 1989, 2007). People with mental health problems often struggle

with this because they are more focused on fear of (and efforts at avoidance of) creating negative emotions in the minds of others and being shamed and unwanted or even harmed by others (Gilbert, 1998a, 2007). If we lose that sense of existing positively for others (worthy of affiliation and care), then the world can become a very threatening and frightening place – and we operate mostly from within our threat systems. In contrast, feeling valued, respected, or wanted stimulates the affiliative system and opens a range of possibilities for social behaviour with a sense of safeness in the social world (Gilbert, 2007, 2009). Kelly, Zuroff, Leybman, and Gilbert (2012) found a measure of general social safeness and capacities for feeling safe with, and connected to others, was a better predictor of vulnerability to psychopathology than negative affect, positive affect, or needs for social support. In contrast, losing the sense of safeness and/or existing positively for others is often behind feelings of disconnectedness and mental health problems.

Connectedness versus loneliness

Related to intersubjectivity, mentalizing and sense of existing positively in the minds of others is the sense of belonging, being like others, being part of and feeling connected to others (Baumeister & Leary, 1995; Cacioppo & Patrick, 2008). Kohut (1977) called these alter-ego needs. Buddhist approaches suggest we should deliberately focus on creating a sense of 'being all the same and thus belonging' called 'fostering equanimity' (Dalai Lama 1995; Tsering, 2008). In regard to self-compassion, Neff (2011) refers to this as a dimension of *common humanity* which is one of her dimensions of self-compassion; the ability to contextualize one's suffering as part of the human condition as opposed to personal, individual and alone. Indeed, a common experience of people with mental health problems is a sense of loneliness and separateness – often shame-based, but not always. Loneliness has a variety of topographies, although a common distinction is between personal loneliness (as an inner feeling of disconnectedness/separateness) and social loneliness (as a lack of social opportunities for relating). In a number of studies up to 20% of individuals describe themselves as personally lonely (Cacioppo & Patrick, 2008).

Feelings of disconnectedness are described in many ways, such as being lonely, alienated, isolated, separated, not belonging, lost, homeless, and even empty (Cacioppo & Patrick, 2008). Loneliness differs from solitude, which is a state that is sought out and enjoyed, whereas loneliness is associated with a yearning and seeking for connectedness, as if the seeking system is active. In some religions, there is a belief that we have a deep yearning to return to God, and it is our separation from God that is the source of much of our misery. Some psychodynamic theories see this yearning and sense of separateness as a yearning to return to the symbiotic state of the womb. However, a more likely explanation is that it is linked to the importance of affiliative and cooperative relating, and group living and belonging. It has been pointed by many authors that we come into the world alone and we die alone, and essentially we are alone inside our own heads, only touching each other physically or by words and expressions to soften this sense of aloneness. Our reality is one of separateness inside our skins. So the feelings of 'aloneness' are a key focus for CFT.

CFT and the two psychologies and mindsets of compassion

So, CFT has its roots in these evolved social processes. Bringing the above themes together we can now begin to think about the processes that may be involved in the *two* 'psychologies' or mindsets of compassion – engagement with, and the alleviation/ prevention of, suffering. Each of these two psychologies depend on a number of
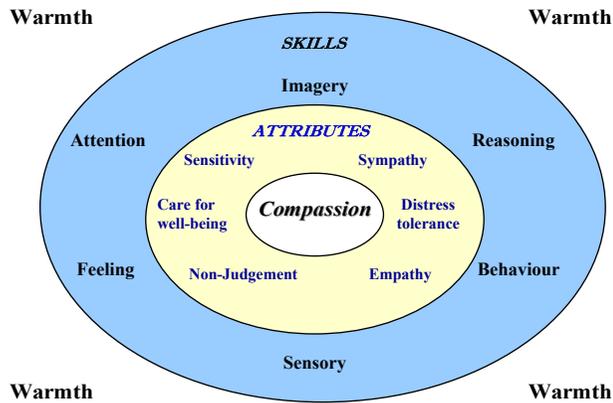
Figure 2. The two psychologies of compassion: attributes/engagement and skills/alleviation/prevention. From P. Gilbert (2009). *The compassionate mind.* With kind permission from Constable Robinson.

subcomponents and competencies which are represented as two circles of interconnected engagement *attributes* and transformative *skills*. These are depicted in Figure 2.

Engagement Attributes

In CFT, the psychology for engaging with suffering involves six core elements (the inner circle) that include (1) caring and the motivation/willingness to notice, turn towards and/ or into suffering rather than turn away; (2) attention sensitivity as the ability to then look out for and be attentive to suffering (3) once we are in contact with suffering then to have an appropriate emotional reaction, that is the ability to be emotionally connected, attuned, and affected by suffering rather than left cold or dissociated from it (sometimes called sympathy or emotional empathy), which raises the issues of; (4) how we learn to tolerate the emotions that are part of, or associated with, suffering; (5) when we are able to engage, and emotionally connect with, hold and tolerate suffering we then become capable of developing mentalizing and have empathic insights; we can shift out of an egocentric perspective and take the perspective of somebody else; or even the perspective of different part of ourselves (for example the perspective of the compassionate self will be different to that of an angry self). If we avoid engaging with suffering, or do so only fleetingly, there may be little opportunity for empathic bridging – the ability to really imagine 'walking in the shoes of the other" or really "sitting with and understanding" our own experiencing/feelings'; (6) to the whole process we bring an accepting, non-critical, non-judgemental approach.

Obviously, each of these competencies has a complex psychology behind them with variations in their development and regulation (for further discussion see Gilbert, 2009; Gilbert & Choden, 2013) and of course they are also recognized in other therapies. For example, dialectical behaviour therapy and acceptance and commitment therapy discuss in some detail the issue of how to inspire a willingness to engage with pain/difficulty and build mindfulness, acceptance and distress tolerance (Hayes *et al*., 2004). Motivational interviewing can explore blocks and facilitators for developing the motives to be compassionate.

Each of these six qualities is interdependent in that if any one of them falters then the compassionate enterprise can struggle. For example, if care-motivation drops, or suffering

becomes intolerable or if empathy is lost, or we become critical and judgemental, then our compassion can struggle. In this model, empathy is a competency of the social mentality of compassion but is not compassion itself. Indeed, empathy can be used for good or bad ends. For therapy, clients may need some help in developing any specific one or all of these engagement attributes.

The motives behind helping behaviours however are not always care based. For example, some suggest that being kind *to be liked* might have been a driver for the evolution of altruism and kindness (Goetz *et al.*, 2010). However, as a personal process 'being kind to be liked or avoid been rejected' is a form of submissive behaviour, which might not require complex empathic skills and could in fact be linked to emotional difficulties. While some degree of this desire can of course be part of caring (because we are mixed motive people) we must be cautious if it becomes the central focus. We have recently begun exploring the concept of 'submissive compassion' – 'engaging in helping behaviour in order to be liked and avoid rejection'. In a preliminary analysis, submissive compassion was significantly associated with depression, anxiety, and stress, whereas genuine compassion was not (Catarino, Gilbert, McEwan, & Baião, in press). Our next studies seek to explore submissive compassion and genuine compassion in terms of empathy and other compassion processes. Compassion might therefore be explored in terms of its intrinsic and extrinsic motivational aspects.

Alleviation and prevention: Transformative skills

Alleviation and prevention (the outer circle) involve being able to (1) pay attention to what is helpful (will involve attention training, cultivating mindfulness and refocusing); (2) able to 'reason' in ways that are helpful (will involve many cognitive therapy approaches, such as re-attribution training or re-appraisal) and forms of perspective taking or mentalizing and a focus on the nature of 'what will be genuinely helpful'; (3) behave in ways that are helpful (that may involve exposing oneself to things one is frightened of, doing helpful things for oneself or others each day, or engaging in appreciation or gratitude exercises); (4) enabling appropriate feeling (which is commonly seen as kindness or some kind of affiliative connected feeling but not always – *e.g.*, it could be linked to emotions like anger and turning anger at (say) injustice to assertiveness; (5) use imagery and meditation like practices to stimulate particular kinds of emotion systems (such as affiliation or confidence); and (6) sensory work such as use of breathing practices, voices tones and facail and body postures to generate physical states (e.g., activate the parasympathetic system) which are conducive to affect regulation and compassion. Core to these aspects is the preparedness to discover, learn, train, and develop. Intention is not enough; we need the wisdom of knowing how to turn intention into effective action (Germer & Siegel, 2012; Gilbert & Choden, 2013).

Compassion focused therapy

The development and cultivation of compassionate as part of our therapeutic interventions is now recognized as an important innovation requiring further research and development (Hoffmann *et al.*, 2011). As discussed in the introduction (Gilbert, this edition), CFT began very simply over 20 years ago with the recognition that many individuals could not create affiliative feelings within themselves. At first, we simply helped people practice generating a compassionate inner voice or texture to their coping thoughts, with feelings of warmth, kindness, and support. This proved more difficult than

anticipated and opened up a whole journey into what is the underlying basis of feeling of affiliation and compassion. It posed questions of why were these emotions so powerfully implicated in the origins and recovery of mental health problems. Since that time CFT has developed a number of core themes, drawing on the science noted above.

Compassion as a self-identity

One of the important processes of CFT is to try to stimulate compassionate social mentalities that coalesce around the *desire to cultivate a compassionate self and use a compassionate perspective/mind* (Gilbert, 2009). This is different from having 'schemas' of compassion or 'values' of compassion and links with the Buddhist concept of bodhichitta (Gilbert & Choden, 2013; Tsering, 2008) with imagery practices (Ringu & Mullen, 2005). In CFT, individuals are invited to imagine the potential benefits of having certain qualities, in particular wisdom (e.g., insight into our tricky brain), strength and sense of authority, and commitment to be compassionate and helpful that recruits aspects of the two 'psychologies' of compassion noted above (Gilbert, 2010; Gilbert & Choden, 2013). This process, of imagining oneself as a particular 'self' from which one then reflects, imagines, reasons, and acts is gaining increasing evidence of effectiveness. For example, practising imagining one's 'best possible self' and relating to difficulties from that sense of self is related to increased optimism and improved coping (Meevissen, Peters, & Alberts, 2011; Peters, Flink, Boersma, & Linton, 2010). Practising compassion for others increases self-compassion (Breines & Chen, 2013), and practising compassion focusing, including becoming a compassionate self, has a range of physiological benefits (Weng *et al.*, 2013).

CFT uses a range of breathing, postural, imaginal, recall of being compassionate, and method acting techniques to help people have an experience of what it is, or could be like being a compassionate self' (Cannon, 2012). This is important because it helps to create 'ideas' in the person's mind about what they might like to aim for. Although we might practice specific skills such as golf, piano playing, painting, or exercise to get physically fit, most people are not aware that they can practice cultivating a particular self-identity and what this will do to their mind (Jazaieri *et al.*, 2013; Weng *et al.*, 2013). The method acting techniques are a way to create insights into compassion qualities and practice noticing/ feeling their effects. You can then show how this aspect of the self-identity can be used in many contexts. For example, in dealing with conflicts within oneself, one could invite the person to explore how different parts of themselves would see a particular problem. 'How would your angry self see this issue and want to act, and how would your anxious self see the issue and want to act?' You can then activate the sense of one's compassionate self and ask 'how does compassionate self see this issue and want to act?' These kinds of exercises help people recognize they have the potential for many *different* perspectives according to which part of them, which (social mentality) motivational or emotional aspect they are identified with. Also they can practice how to be mindful of 'which part of them' is active and which part of them they would *ideally like* to be active and running the show, and how to access the 'compassionate self' when needed (see Gilbert, 2012).

CFT is contextualized in a basic view of humanity, and the serious problems that the way the human brain evolved has given us. Our capacity for anger, hatred, and even sadism to ourselves and others is not pathologized but are seen as basic human potentials that can be activated in certain contexts and conditions. As clients begin to share this perspective it significantly helps to depersonalize and de-shame them – to see our personal problems as part of the human condition. CFT also highlights that our minds are

inherently full of conflicts – again through no fault of our own (Gilbert, 2000b). Contacting the sadness in the reality of suffering (because of what we are – short lived, disease prone with tricky brains – none of which we chose) can be a stimulus for compassion and wanting to make changes and take control of one's life. Compassion moves us to wanting to take responsibility to change and do what we can to engage with and help with the suffering of ourselves and others. It is important, however, that while we can contact the reality of suffering (the first psychology of compassion) we do not dwell there in some kind of ruminative stuckness in pain. The key is developing the motivation to work for change, and the joyfulness, meaningfulness, and excitement of that if we could do it – and coping with setbacks along the way.

CFT focuses on helping people access and stimulate affiliative motives, emotions and competencies that can be part of the experience of a compassionate self. It includes interventions such as the use of breathing, posture, facial expressions, and voice tones and other exercises to help balance the autonomic nervous system. We teach a series of compassion cultivation exercises that involve attention training, and practising mindfulness, mentalizing, compassion self-identity cultivation, the use of compassionate imagery, compassionate letter writing, and enacting compassionate behaviours on a regular basis. These are designed to stimulate the motivation, emotion, and cognitive systems that underpin compassion (and its social mentalities), so that they become more integrated into sense of a self-identity.

The 'compassionate' self becomes a focal inner sense or grounded position associated with organising ways of attending, feeling, thinking, and behaving. Cultivating and developing that self-focus can help balance and orientate basic motivation and emotion systems. This is depicted in Figure 3.

So in essence, there a number of CFT phases that are not necessarily linear:

1. A psycho-education, de-shaming and de-personalizing phase that focuses on why we have a 'tricky brain', how our sense of self is partly a social construction and why much of what goes on in the mind is not our fault. In reducing shaming and blaming, people can develop a new focus with a different motive system (desire to care and help) for building and taking responsibility to change. We can start to choose and cultivate different 'versions' of ourselves. This phase also explains the nature of three types of affect regulation and emotional experience.
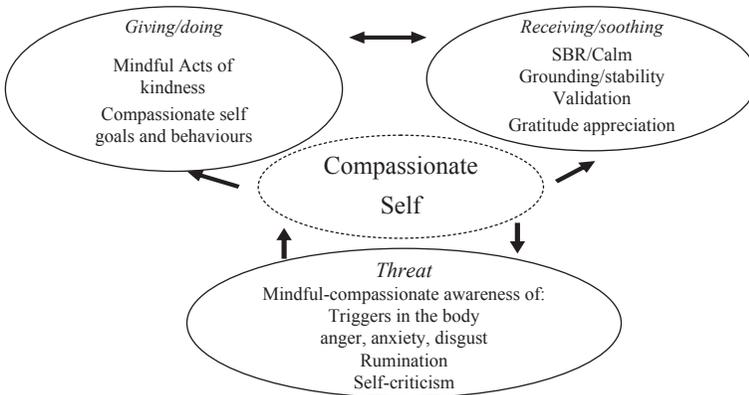

Figure 3. Compassionate self as an inner organizing process.

2. A formulation process where individuals gain insight into how early life experiences created their *threat* based coping safety strategies, *drive* based (ambitions, desired self-identities) and *affiliative* soothing base strategies and capacities. These in turn are both externally directed (e.g., how to interact with the minds of others) and internally directed; (how we know, understand and regulate our own motives, emotions, fantasies and sense of self). The formulation will also illuminate core memories around which a sense of self and emotion experiences will have coalesced. These can then become a focus for work as in trauma memory re-scripting.

3. Cultivating and building compassionate capacities, by working with affiliative emotions, and learning to practice parasympathetic activation, for example through imagery and breathing exercises.

4. Building compassionate capacity around the sense of identity (compassionate self) with behavioural practices. How to take a compassion perspective and explore what is helpful; what will be the focus of the practice, what will the person cultivate within themselves during the therapy journey? Clients come to understand that compassion is not a weakness but a way of building courage.

5. As these develop we can then use the compassionate self/mind to engage with and work with specific problems – such anxiety, depressive rumination, self-criticism, shame, trauma memory. This of course takes us into the territory of many other therapies. Here, behavioural experiments with opportunities for new emotional experiences are very important because people are learning the value of compassion (for themselves and others) through action. Below is an example.

An example of CFT: Working compassionately with shame, self-criticism, and the blocks to self-affiliative processing

Two of the most pervasive problems in mental health are self-criticism and self-disliking or even hating, and shame (Gilbert & Irons, 2005; Kannan & Levitt, 2013; Zuroff, Santor, & Mongrain, 2005). Clinical levels of shame and self-criticism represent serious disruptions to the capacity for stimulating inner affiliative systems that are so important for emotion regulation and well-being. Self-criticism works through the threat system, whereas compassion works with more affiliative brain systems (Longe *et al.*, 2010; Weng *et al.*, 2013). Commonly, chair work that gives voice to the critic (Whelton & Greenberg, 2005), reveals it to be fused with threat-based emotions; anger and contempt are common. Not surprisingly then, self-criticism can also stimulate many of the defences of submissive behaviour or even the sense of defeat. So for example, after criticizing the self, moving to the chair of experiencing that criticism, some individuals will often show slumped body posture, down-turned face with a sense of hopelessness and depression, and commonly agreeing with the attacks of the inner critic (Whelton & Greenberg, 2005).

While there are many ways to understand the origins, functions, and forms of self-criticism (Gilbert *et al.*, 2004; Zuroff *et al.*, 2005), the therapeutic question is how to shift from this threat way of relating to oneself to a more affiliative way (Gilbert & Irons, 2005; Neff, 2011). The CFT approach recognizes that the emotions in the critic (e.g., disappointment, frustration, anger, or contempt) are all threat system, defensive emotions. So, this raises the issue of what *is* the threat, or what fears are generating these defensive self-direct emotions; what sits behind the critic? Even hatred (be it to self or others) is a response to a form of threat. So it is useful to direct attention (via functional analysis) to an exploration of the nature of the threat. The typical threat that

sits behind self-criticism is the *threat of shame* – being seen as, or experiencing oneself as, incompetent, useless, ugly, undesired, unwanted – the threat of social criticism or even attack, disconnection, being marginalized, unloved, and unwanted; and at times weak and defenceless (Gilbert, 2007; Gilbert & Irons, 2005). As discussed above because we are such social beings these are serious threats to humans (Wesselmann *et al.*, 2013).

So, the triggers for self-criticism are often threat. For example, Sally 'hated herself for being overweight' and would often berate herself, even at times cut herself. She imagined herself as 'ugly' to others, rejectable (high threat) linked to memories of being bullied, yearning for connection/acceptance and loneliness. So her self-anger and hatred were directed to what she saw as (now) causing her to be vulnerable to those threats (her weight and lack of control over her eating -but of course her eating was partly an effort to block out painful feelings).

Enabling the client to take a compassionate self-view to the inner critic facilitates the process of 'mentalizing the critic' and thus recognizing what threats are generating one's self-hatred or anger. Compassion is then directed to those fears and emotions *that sit behind the critic*. These might be rooted in painful memories of feeling very vulnerable, alone, or rejected. That might then direct attention to the fact that rather than working with the critic directly one needs to go into the emotional memories that the critic seems to be linked with. If one is re-scripting emotional memories (Arntz, 2011; Ecker, Ticic & Hulley, 2012) one can focus on a compassionate re-script (Hackmann, 2005). One can also facilitate 'the compassionate self or image' to enter into the memory of the child and create a caring compassionate interaction in the re-scripting (Lee, 2005). So in essence one activates the affiliative emotion system to work with the threat memory from within. One is re-coding the emotional memory with the new affect processing system of the affiliative system that was evolved to down regulate threat. One patient suggested that 'I realized I could become the source of love and care for myself that I did not have as a child'.

This type of engagement commonly opens to grief work from previous emotional traumas (Gilbert & Irons, 2005). Basically, the compassionate journey is becoming more in touch with the reality of suffering, more tolerant and empathically engaged with what one has experienced. As much of it can be focused on feeling unloved, unwanted, rejected (shamed), and often lonely, the grieving process is important and begins a process of trying to process the loss or what was wanted or needed. We take the basic definition of compassion (see above) and apply it to oneself including the critical self. So basically the process is to identify threat emotions that fuel criticism, recognize the vulnerability to (fears of) harm the critic is responding to, and to address those, for example, fears of ridicule, and rejection and their associated memories of loneliness and abandonment perhaps.

Anger and assertiveness

A common fear in these contexts is fear of anger to others, even to those who have been hurtful. Nietzsche apparently noted that 'no one blames themselves without a secret wish for vengeance' a theme that Freud took up in his view of depression as anger turned inward (Ellenberger, 1970). Both suggested that at times it is easier to be self-critical than critical/hostile to others. Indeed, we can see this aspect in religion too where people blame themselves rather than God for their misfortunes (Gilbert & Irons, 2005). The role of anger and the fear of anger in mental health problems have been the subject for intense work within the psychodynamic model over many years (for a helpful overview, see

Busch, 2009). So, it is important to help clients explore if the inner critic is a representation of a hostile other such as a parent, teacher, or some other bully where assertive responses are appropriate. The therapist then looks at the fear of expressing assertiveness/anger, which can be the fear of retaliation/rejection, fear of being disloyal (guilt) to someone one depends on or wants to love or be loved by, identification 'if I am aggressive like they were I become like them' or cognitive dissonance 'I am just not an angry person'.

In this context, it is usually better to externalize the critic as, for example, the bully and then engage in chair work, which might actually involve expressing anger. This is mainly to address the fear of feeling anger – and in that sense follows a typical behavioural exposure paradigm. Just as it is helpful learning to be able to tolerate anxiety without running away and acting it out, so it is important to be able to tolerate anger without acting it out destructively or avoiding it. The brain is such that we have innate powerful mechanisms for defence and these will be stimulated by the relevant stimuli whether we like it or not, So feeling a counter anger/rage to being hurt is a very basic defence people need to be able to tolerate and work with adaptively. Obviously, it is important that clients do not get stuck 'just feeling intense rage' or 'impotent rage' (raging but feeling hopeless too) and can eventually move on to maybe forgiveness (being clear about what forgiveness is and what it is not). Indeed, some individuals who are very 'happy' being angry may actually be avoidant of other emotions such as sadness or loneliness. So any emotion can be used as a safety strategy to block another. Compassion is not about the avoidance of anger or being stuck in a weak submissive position. Compassion involves developing the courage to be open to our anger and rage, not some kind of 'soothing it away' Indeed, to say it again, soothing is useful to act like a safe haven but also in preparation to courageously engage with what we need to.

Conclusion

Compassion focused therapy is rooted in evolutionary approaches to the emergence of the human mind and the role of affiliation that regulates threat processing and textures caring, helping, sharing, and feeling valued. The evolution of different types of affiliation opened pathways for the evolution of a social brain with abilities for empathy, intersubjectivity, and an interest in what goes on in the minds of others. Individuals who have not had a chance to develop affiliative systems, or for whom caring others (e.g., parents) were also very frightening, abusing, or neglecting, can have a compromised capacity for experiencing and expressing affiliative motives and emotion. Indeed, they can be frightened of giving, receiving, and self-focused affiliative motives and emotions. This will severely affect and limit their abilities to regulate drive and threat systems.

CFT is called compassion *focused* therapy, and not compassion therapy because it focuses on developing competencies and brain systems that play important roles in threat regulation, well-being, and prosocial behaviour (improving prosocial behaviour being sometimes forgotten as a potential goal of therapy). However, CFT uses many standard, evidence-based, interventions, especially perspective taking and reappraisal, behavioural interventions of exposure, memory re-scripting, imagery and trauma work, behavioural practice and developing new habits (Gilbert, 2010; see Goss and Allan, this edition). Whereas many therapies focus on reducing the negative and threat-based systems, directly, CFT argues for the necessity of *also* developing capacities to experience and tolerate affiliative motives and emotions. This is because these evolved to be, and are wired up to be, powerful regulators of the threat system – and will create a different sense

of self and way of relating to oneself and others. In CFT generating affiliative feelings to self and others and knowing others feel like that to oneself, helps us function at our optimum.

The most pervasive problems in mental health are for people who struggle to build affiliative relationships and experience isolation; people who have little interest in the well-being of others and are exploitative and harmful to others, and of course people who treat themselves in pretty hostile, uncaring, and non-compassionate ways (Gilbert & Irons, 2005; Neff, 2011). However you look at it, the dimensions of caring and affiliation, and lack of it, is central to so much in mental health and prosocial behaviour. Clinical psychology could become a major impetus to explore how these potentials within us can be better cultivated in our homes, schools, businesses, and politics as well as our clinics. We now have the science to support compassion as a major focus for our profession.

Acknowledgements

References

Arntz, A. (2011). Imagery rescripting for personality disorders. *Cognitive and Behavioral Practice*, *18*, 466–481.

Bagwell, C., & Schmidt, M. E. (2013). *Friendships in childhood and adolescence*. New York, NY: Guildford Press.

Barkow, J. H. (1989). *Darwin, sex and status: Biological approaches to mind and culture*. Toronto, ON: University of Toronto Press.

Baron-Cohen, S. (2012). *Zero degrees of empathy*. London, UK: Penguin.

Batson, C., Turk, C., Shaw, L., & Klein, T. (1995). Information function of empathic emotion: Learning that we value other's welfare. *Journal of Personality and Social Psychology*, *68*, 300–313. doi:10.1037/0022-3514.68.2.300

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*, 323–370. doi:10.1037//1089-2680.5.4.323

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. doi:10.1037/0033-2909.117.3.497

Beck, A. T. (1987). Cognitive models of depression. *Journal of Cognitive Psychotherapy: An International Quarterly*, *1*, 5–38.

Beck, A. T., Emery, G., & Greenberg, R. L. (1985). *Anxiety disorders and phobias: A cognitive approach*. New York, NY: Basic Books.

Bell, D. C. (2001). Evolution of care giving behavior. *Personality and Social Psychology Review*, *5*, 216–229.

Belsky, J., & Pluess, M. (2009). Beyond diathesis stress: Differential susceptibility to environmental influences. *Psychological Bulletin*, *135*, 885–908. doi:10.1037/a0017376

Bick, J., Naumova, O., Hunter, S., Barbot, B., Lee, M., Luthar, S. S., … Grigorenko, E. (2012). Childhood adversity and DNA methylation of genes involved in the hypothalamus–pituitary–adrenal axis and immune system: Whole-genome and candidate-gene associations. *Development and Psychopathology*, *24*, 1417–1425. doi:10.1017/S0954579412000806

Bierhoff, H. W. (2005). The psychology of compassion and altruism. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 148–167). London, UK: Brunner-Routledge.

Bowlby, J. (1969). *Attachment: Attachment and loss* (Vol. 1). London, UK: Hogarth Press.

Bowlby, J. (1973). *Separation, anxiety and anger: Attachment and loss* (Vol. 2). London, UK: Hogarth Press.

Bowlby, J. (1980). *Attachment and loss, volume III: Loss, sadness and depression*. London, UK: The Hogarth Press and the Institute of Psycho-Analysis.

Braehler, C., Gumley, A., Harper, J., Wallace, S., Norrie, J., & Gilbert, P. (2013). Exploring change processes in compassion focused therapy in psychosis: Results of a feasibility randomized controlled trial. *British Journal of Clinical Psychology*, *52*, 199–214. doi:10.1111/bjc.12009

Breines, J. G., & Chen, S. (2013). Activating the inner caregiver: The role of support-giving schemas in increasing state self-compassion. *Journal of Experimental Social Psychology*, *49*, 58–64. doi:10.1016/j.jesp.2012.07.015

Brewer, J. A., Worhunsky, P. D., Gray, J. R., Tang, Y. Y., Weber, J., & Kober, H. (2011). Meditation experience is associated with differences in default mode network activity and connectivity. *Proceedings of the National Academy of Sciences USA*, *108*, 20254–20259. doi:10.1073/pnas.1112029108

Busch, F. N. (2009). Anger and depression. *Advances in Psychiatric Treatment*, *15*, 271–276. doi:10.1192/apt.bp.107.004937

Buss, D. A. (2009). The great struggles of life: Darwin and the emergence of evolutionary psychology. *American Psychologist*, *64*, 140–148. doi:10.1037/a0013207

Cacioppo, J. T., & Patrick, W. (2008). *Loneliness: Human nature and the need for social connection*. New York, NY: Norton.

Cannon, D. (2012). *In-depth acting*. London, UK: Oberon.

Carter, C. S. (1998). Neuroendocrine perspectives on social attachment and love. *Psychoneuro-endocrinology*, *23*, 779–818. doi:10.1016/S0306-4530(98)00055-9

Catarino, F., Gilbert, P., McEwan, K., & Baião, R. (in press). Compassion motivations: Distinguishing submissive caring and helpful behaviour from genuine compassion and its association with depression, anxiety and stress. *Journal of Social and Clinical Psychology*.

Confer, J. C., Easton, J. A., Fleischman, D. S., Goetz, C. D., Lewis, D. M. G., Perilloux, C., & Buss, D. M. (2010). Evolutionary psychology controversies, questions, prospects, and limitations. *American Psychologist*, *65*, 110–126. doi:10.1037/a0018413

Cortina, M., & Liotti, G. (2010). Attachment is about safety and protection, intersubjectivity is about sharing and social understanding: The relationships between attachment and intersubjectivity. *Psychoanalytic Psychology*, *27*, 410–441. doi:10.1037/a0019510

Cozolino, L. (2007). *The neuroscience of human relationships: Attachment and the developing brain*. New York, NY: Norton.

Cozolino, L. (2008). *The healthy aging brain: Sustaining attachment, attaining wisdom*. New York, NY: Norton.

Cozolino, L. (2013). *The social neuroscience of education*. New York, NY: Norton.

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*, 555–575. doi:10.1037/0022-3514.95.3.555

Crocker, J., Canevello, A., Breines, J. G., & Flynn, H. (2010). Interpersonal goals and change in anxiety and dysphoria in first-semester college students. *Journal of Personality and Social Psychology*, *98*, 1009–1024. doi:10.1037/a0019400

Crosier, B. S., Webster, G. D., & Dillon, H. D. (2012). Wired to connect: Evolutionary psychology and social networks. *Annual Review of Psychology*, *16*, 230–239. doi:10.1037/a0027919

Dalai Lama. (1995). *The power of compassion*. Delhi, India: HarperCollins.

Danquah, A. N., & Berry, K. (2013). *Attachment theory in adult mental health: A guide to clinical practice*. London, UK: Routledge.

Davidson, R., & Harrington, A. (Eds.). (2002). *Visions of compassion: Western scientists and Tibetan Buddhists examine human nature*. New York, NY: Oxford University Press.

Decety, J., & Ickes, W. (2011). *The social neuroscience of empathy*. Cambridge, MA: MIT Press.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.

De Dreu, C. K. W., Greer, L. L., Van Kleef, G. A., Shalvi, S., & Handgraaf, J. J. (2011). Oxytocin promotes human ethnocentrism. *Proceedings of the National Academy of Sciences USA*, *108*, 1262–1266. doi:10.1073/pnas.1015316108

Depue, R. A., & Morrone-Strupinsky, J. V. (2005). A neurobehavioral model of affiliative bonding. *Behavioral and Brain Sciences*, *28*, 313–395.

Desbordes, G., Negi, L. T., Pace, T. W., Wallace, A. B., Raison, C. L., & Schwartz, E. L. (2013). Effects of mindful-attention and compassion meditation training on amygdala response to emotional stimuli in an ordinary, non-meditative state. *Frontiers in Human Neuroscience*. Advance online publication. doi:10.3389/fnhum.2012.00292

Dunbar, R. I. M. (2010). The social role of touch in humans and primates: Behavioural function and neurobiological mechanisms. *Neuroscience and Biobehavioral Reviews*, *34*, 260–268. doi:10.1016/j.neubiorev.2008.07.001

Ecker, B., Ticic, R, & Hulley, L. (2012). Unlocking The Human Brain. Unlocking Symptoms at their Roots using Memory Reconsolidation. Hove: Routledge.

Eisenberg, N. (2002). Empathy-related emotional responses, altruism, and their socialization. In R. Davidson & A. Harrington (Eds.), *Visions of compassion: Western scientists and Tibetan Buddhists examine human nature* (pp. 131–164). New York, NY: Oxford University Press.

Ellenberger, H. F. (1970). *The discovery of the unconscious. The history and evolution of dynamic psychiatry*. New York, NY: Basic Books.

Fenney, B. C., & Thrush, R. L. (2010). Relationship influences on exploration in adulthood: The characteristics and function of a secure base. *Journal of Personality and Social Psychology*, *98*, 57–76. doi:10.1037/a0016961

Field, T. (2000). *Touch therapy*. New York, NY: Churchill Livingstone.

Fogel, A., Melson, G. F., & Mistry, J. (1986). Conceptualising the determinants of nurturance: A reassessment of sex differences. In A. Fogel & G. F. Melson (Eds.), *Origins of nurturance: Developmental, biological and cultural perspectives on caregiving* (pp. 69–90). Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). *Affect regulation, mentalization, and the development of the self*. London, UK: Other Press.

Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, *2*, 300–319. doi:10.1037/a0013262

Gay, P. (1995). *The cultivation of hatred*. London, UK: Fontana Press.

Germer, C. K., & Siegel, R. D. (2012). *Wisdom and compassion in psychotherapy*. New York, NY: Guilford.

Gilbert, P. (1984). *Depression: From psychology to brain state*. London, UK: Lawrence Erlbaum Associates Ltd.

Gilbert, P. (1989). *Human nature and suffering*. Hove, UK: Lawrence Erlbaum Associates.

Gilbert, P. (1992). *Depression: The evolution of powerlessness*. Hove, UK: Lawrence Erlbaum Associates Ltd.; New York, NY: Guilford.

Gilbert, P. (1993). Defence and safety: Their function in social behaviour and psychopathology. *British Journal of Clinical Psychology*, *32*, 131–153. doi:10.1111/j.2044-8260.1993.tb01039.x

Gilbert, P. (1995). Biopsychosocial approaches and evolutionary theory as aids to integration in clinical psychology and psychotherapy. *Clinical Psychology and Psychotherapy*, *2*, 135–156. doi:10.1002/cpp.5640020302

Gilbert, P. (1998a). What is shame? Some core issues and controversies. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology and culture* (pp. 3–36). New York, NY: Oxford University Press.

Gilbert, P. (1998b). Evolutionary psychopathology: Why isn't the mind better designed than it is? *British Journal of Medical Psychology*, *71*, 353–373. doi:10.1111/j.2044-8341.1998.tb00998.x

Gilbert, P. (2000a). Varieties of submissive behaviour: Their evolution and role in depression. In L. Sloman & P. Gilbert (Eds.), *Subordination and defeat. An evolutionary approach to mood disorders* (pp. 3–46). Hillsdale, NJ: Lawrence Erlbaum.

Gilbert, P. (2000b). 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, UK: Psychology Press.

Gilbert, P. (2002). Evolutionary approaches to psychopathology and cognitive therapy. *Journal of Cognitive Psychotherapy: An International Quarterly* (special edition: Evolutionary psychology and cognitive therapy, *16*, 263–294). doi:10.1891/jcop.16.3.263.52515

Gilbert, P. (2005a). Compassion and cruelty: A biopsychosocial approach. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 3–74). London, UK: Routledge.

Gilbert, P. (2005b). Social mentalities: A biopsychosocial and evolutionary reflection on social relationships. In M. Baldwin (Ed.), *Interpersonal cognition* (pp. 299–333). New York, NY: Guilford.

Gilbert, P. (2006). Evolution and depression: Issues and implications (invited review). *Psychological Medicine*, *36*, 287–297. doi:10.1017/S003329170500611

Gilbert, P. (2007). The evolution of shame as a marker for relationship security. In J. L. Tracy, R. W. Robins & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 283–309). New York, NY: Guilford.

Gilbert, P. (2009). *The compassionate mind: A new approach to the challenges of life*. London, UK: Constable & Robinson.

Gilbert, P. (2010). *Compassion focused therapy: The CBT distinctive features series*. London, UK: Routledge.

Gilbert, P. (2012). Compassion focused therapy. In W. Dryden (Ed.), *Cognitive behaviour therapy* (pp. 140–165). London, UK: Sage.

Gilbert, P. (2013). Depression: The challenges of an integrative, biopsychosocial, evolutionary approach. In M. Power (Ed.), *The Wiley-Blackwell handbook of mood disorders* (2nd ed., pp. 229–288). Chichester, UK: J. Wiley.

Gilbert, P., & Allan, S. (1998). The role of defeat and entrapment (arrested flight) in depression: An exploration of an evolutionary view. *Psychological Medicine*, *28*, 584–597.

Gilbert, P., Broomhead, C., Irons, C., McEwan, K., Bellew, R., Mills, A., & Gale, C. (2007). Striving to avoid inferiority: Scale development and its relationship to depression, anxiety and stress. *British Journal of Social Psychology*, *46*, 633–648. doi:10.1348/014466606X157789

Gilbert, P., & Choden. (2013). *Mindful compassion*. London, UK: Constable-Robinson.

Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 263–325). London, UK: Routledge.

Gilbert, P., Clarke, M., Hempel, S., Miles, J. N. V., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms style and reasons in female students. *British Journal of Clinical Psychology*, *43*, 31–50.

Gilbert, P., McEwan, K., Gibbons, L., Chotai, S., Duarte, J., & Matos, M. (2012). Fears of compassion and happiness in relation to alexithymia, mindfulness and self-criticism. *Psychology and Psychotherapy*, *84*, 239–255. doi:10.1348/147608310X526511

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy*, *84*, 239–255. doi:10.1348/147608310X526511

Gillath, O., Shaver, P. R., & Mikulincer, M. (2005). An attachment-theoretical approach to compassion and altruism. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 121–147). London, UK: Routledge

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin*, *136*, 351–374. doi:10.1037/a0018807

Greenberg, L. S., Rice, L. N., & Elliott, R. (1993). *Facilitating emotional change. The moment by moment process*. New York, NY: Guilford.

Hackmann, A. (2005). Compassionate imagery in the treatment of early memories in axis I anxiety disorders. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 353–368). London, UK: Routledge.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, *108*, 814–834. doi:10.1037//0033-295X.108.4.814

Harlow, H. F., & Mears, C. (1979). *The human model: Primate perspectives*. New York, NY: Winston & Sons.

Hayes, S. C., Follette, V. M., & Linehan, M. N. (2004). *Mindfulness and acceptance: Expanding the cognitive behavioral tradition*. New York, NY: Guilford.

Heard, D., & Lake, B. (1988). *The challenge of attachment for caregiving*. London, UK: Routledge.

Hoffmann, S. G., Grossman, P., & Hinton, D. E. (2011). Loving-kindness and compassion meditation: Potential for psychological intervention. *Clinical Psychology Review*, *13*, 1126–1132. doi:10.1016/j.cpr.2011.07.003

Hrdy, S. B. (2009). *Mothers and others: The evolutionary origins of mutual understanding*. Boston, MA: Harvard University Press.

Insel, T. R. (2010). The challenge of translation in social neuroscience: A review of oxytocin, vasopressin, and affiliative behavior. *Neuron*, *65*, 768–779. doi:10.1016/j.neuron.2010.03.005

Izard, C. E. (2002). Translating emotion theory and research into preventive interventions. *Psychological Bulletin*, *128*, 796–824. doi:10.1037//0033-2909.128.5.796

Jazaieri, H., Jinpa, G. T., McGonigal, K., Rosenberg, E. l., Finkelstein, J., Simon-Thomas, E., … Goldin, P. R. (2013). Enhancing compassion: A randomized controlled trial of a compassion cultivation training program. *Journal of Happiness Studies*, *14*, 1113–1129. doi:10.1007/s10902-012-9373-z

Johnson, S. L., Leedom, L. L., & Muhtadie, L. (2012). The dominance behavioral system and psychopathology: Evidence from self-report, observational, and biological studies. *Psychological Bulletin*, *138*, 692–743. doi:10.1037/a0027503

Joshanloo, M. (2013). The influence of fear of happiness beliefs on responses to the satisfaction with life scale. *Personality and Individual Differences*, *54*, 647–651. doi:10.1016/j.paid.2012.11.011

Kannan, D., & Levitt, H. M. (2013). A review of client self-criticism in psychotherapy. *Journal of Psychotherapy Integration*, *23*, 166–178. doi:10.1037/a0032355

Kasser, T. (2002). *The high price of materialism*. Cambridge, MA: MIT Press.

Kelly, A. C., Zuroff, D. C., Leybman, M. J., & Gilbert, P. (2012). Social safeness, received social support, and maladjustment: Testing a tripartite model of affect regulation. *Cognitive Therapy and Research*, *36*, 815–826. doi:10.1007/s10608-011-9432

Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition and Emotion*, *13*, 505–521. doi:10.1080/026999399379168

Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*, *137*, 68–96. doi:10.1037/a0021466

Knox, J. (2003). *Archetype, attachment, analysis: Jungian psychology and the emergence of mind*. London, UK: Brenner-Routledge.

Kohut, H. (1977). *The restoration of the self*. New York, NY: International Universities Press.

Kraus, M. W., Piff, P. K., Mendoza-Denton, R., Rheinschmidt, M. L., & Keltner, D. (2012). Social class, solipsism, and contextualism: How the rich are different from the poor. *Psychological Review*, *119*, 546–572. doi:10.1037/a0028756

Krygier, J. R., Heathers, J. A., Shahrestani, S., Abbott, M., Gross, J. J., & Kemp, A. H. (2013). Mindfulness meditation, well-being, and heart rate variability: A preliminary investigation into the impact of intensive Vipassana meditation. *International Journal of Psychophysiology*, *89*, 305–313. doi:10.1016/j.ijpsycho.2013.06.017

LeDoux, J. (1998). *The emotional brain*. London, UK: Weidenfeld and Nicolson.

Lee, D. (2005). The perfect nuturer. A model to develop a compassionate mind within the context of cognitive therapy. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 326–351). London, UK: Routledge.

Liotti, G., & Gilbert, P. (2010). Mentalising, motivations and social mentalities: Theoretical considerations and implications for psychotherapy. *Psychology and Psychotherapy*, *84*, 9–25. doi:10.1348/147608310X520094

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. doi:10.1037/1089-2680.11.2.112

Longe, O., Maratos, F. A., Gilbert, P., Evans, G., Volker, F., Rockliffe, H., & Rippon, G. (2010). Having a word with yourself: Neural correlates of self-criticism and self-reassurance. *NeuroImage*, *49*, 1849–1856. doi:10.1016/j.neuroimage.2009.09.019

Lutz, A., Brefczynski-Lewis, J., Johnstone, T., & Davidson, R. J. (2008). Regulation of the neural circuitry of emotion by compassion meditation: Effects of the meditative expertise. *Public Library of Science*, *3*, 1–5. doi:10.1371/journal.pone.0001897

Lyubomirsky, S. J. (2007). *The how of happiness*. New York, NY: Sphere.

Mankus, A. M., Aldao, A., Kerns, C., Mayville, W., & Mennin, D. (2013). Mindfulness and heart rate variability in individuals with high and low generalized anxiety symptoms. *Behaviour Research and Therapy*, *51*, 386–391. doi:10.1016/j.brat.2013.03.005

Marks, I. M. (1987). *Fears, phobias, and rituals: Panic, anxiety and their disorders*. Oxford, UK: Oxford University Press.

McGuire, M. T., & Troisi, A. (1998). *Darwinian psychiatry*. New York, NY: Oxford University Press.

Meevissen, Y. M. C., Peters, M. L., & Alberts, H. J. E. M. (2011). Become more optimistic by imagining a best possible self: Effects of a two week intervention. *Journal of Behavior Therapy and Experimental Psychiatry*, *42*, 371–378. doi:10.1016/j.jbtep.2011.02.012

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: Guilford.

Mithen, S. (1996). *The prehistory of the mind: A search for the origins of art and religion*. London, UK: Thames & Hudson.

Neff, K. (2011). *Self compassion*. New York, NY: Morrow.

Neff, K. D., Hsieh, Y., & Dejitterat, K. (2005). Self-compassion, achievement goals and coping with academic failure. *Self and Identity*, *4*, 263–287. doi:10.1080/13576500444000317

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality*, *77*, 23–50. doi:10.1111/j.1467-6494.2008.00537.x

Nesse, R. (2005). Evolutionary psychology and mental health. In D. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 903–929). Hoboken, NJ: John Wiley and Sons.

Nickerson, R. S. (1999). How we know – and sometimes misjudge – what others know: Inputting one's own knowledge to others. *Psychological Bulletin*, *125*, 737–759.

Niemi, L., & Young, L. (2013). Caring across boundaries versus keeping boundaries intact: Links between moral values and interpersonal orientations. *PLoS ONE*, *8*, e81605. doi:10.1371/journal.pone.0081605

Pani, L. (2000). Is there an evolutionary mismatch between the normal physiology of the human dopaminergic system and current environmental conditions in industrialized countries? *Molecular Psychiatry*, *5*, 467–475.

Panksepp, J. (2010). Affective neuroscience of the emotional Brainmind: Evolutionary perspectives and implications for understanding depression. *Dialogues in Clinical Neuroscience*, *12*, 383–399.

Pauley, G., & McPherson, S. (2010). The experience and meaning of compassion and self-compassion for individuals with depression or anxiety. *Psychology and Psychotherapy: Theory, Research and Practice*, *83*, 129–143. doi:10.1348/147608309X471000

Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*, *56*, 1–28. doi:10.1146/annurev.psych.56.091103.070141

Peters, M. L., Flink, I. K., Boersma, K., & Linton, S. J. (2010). Manipulating optimism: Can imagining a best possible self be used to increase positive future expectancies? *The Journal of Positive Psychology*, *5*, 204–211. doi:10.1080/17439761003790963

Phillips, A., & Taylor, B. (2009). *On kindness*. London, UK: Hamish Hamilton Press.

Porges, S. W. (2007). The polyvagal perspective. *Biological Psychology*, *74*, 116–143. doi:10.1016/j.biopsycho.2006.06.009

Price, J. S. (1972). Genetic and phylogenetic aspects of mood variations. *International Journal of Mental Health*, *1*, 124–144.

Ringu, T. R., & Mullen, K. (2005). The Buddhist use of compassionate imagery in mind healing. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 218–238). London, UK: Routledge.

Rockliff, H., Karl, A., McEwan, K., Gilbert, J., Matos, M., & Gilbert, P. (2011). Effects of intranasal oxytocin on compassion focused imagery. *Emotion*, *11*, 1388–1396. doi:10.1037/a0023861

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*, 54–67. doi:10.1006/ceps.1999.1020

Sachs, J. (2012). *The price of civilization: Economics and ethics after the fall*. London, UK: Vintage.

Sapolsky, R. M. (1994). *Why zebras don't get ulcers*. New York, NY: St Martin's Press.

Sidanius, J., & Pratto, F. (2004). Social dominance theory: A new synthesis. In J. T. Jost & J. Sidanius (Eds.), *Political psychology* (pp. 315–322). London, UK: Routledge.

Siegel, D. (2012). *The developing mind, second edition: How relationships and the brain interact to shape who we are*. New York, NY: New York Guilford Press.

Simon-Thomas, E. R., Godzik, J., Castle, E., Antonenko, O., Ponz, A., Kogan, A., & Keltner, D. J. (2012). An fMRI study of caring vs self-focus during induced compassion and pride. *Social Cognitive and Affective Neuroscience*, 7, 635–648. doi:10.1093/scan/nsr045

Slavich, G. M., & Cole, S. W. (2013). The emerging field of human social genomics. *Psychological Science*. Advance online publication. doi:10.1177/2167702613478594

Spinks, P., Rutherford, H. E., & Needham, A. P. (2010). From homininity to humanity: Compassion for the earliest archiacs to modern humans. *Journal of Archaeology, Conscious and Culture*, *3*, 303–325A. doi:10.2752/175169610X12754030955977

Sturman, E. (2011). Involuntary subordination and its relation to personality, mood, and submissive behavior. *Psychological Assessment*, *23*, 262–276. doi:10.1037/a0021499

Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York, NY: Guilford.

Taylor, P., Gooding, P., Wood, A. N., & Tarrier, N. (2011). The role of defeat and entrapment in depression, anxiety and suicide. *Psychological Bulletin*, *137*, 391–420. doi:10.1037/a0022935

Trevarthen, C., & Aitken, K. (2001). Infant intersubjectivity: Research, theory, and clinical applications. *Journal of Child Psychology and Psychiatry*, *42*, 3–48.

Tsering, G. T. (2008). *The awakening mind: The foundation of Buddhist thought* (Vol. 4). London, UK: Wisdom Press.

Twenge, J. M., Gentile, B., DeWall, C. N., Ma, D., Lacefield, K., & Schurtz, D. R. (2010). Birth cohort increases in psychopathology among young Americans, 1938–2007: A cross-temporal meta-analysis of the MMPI. *Clinical Psychology Review*, *30*, 145–154. doi:10.1016/j.cpr.2009.10.005

Van Doesum, N. J., Van Lange, D. A., & Van Lange, P. A. (2013). Social mindfulness: Skill and will to navigate the social world. *Journal of Personality and Social Psychology*, *105*, 86–103. doi:10.1037/a0032540

Van Vugt, M., & Park, J. H. (2009). Guns, germs, and sex: How evolution shaped our intergroup psychology. *Social and Personality Psychology Compass*, *3*, 927–938. doi:10.1111/j.1751-9004.2009.00221.x

Vitaliano, P. P., Zhang, J., & Scanlan, J. M. (2003). Is caregiving hazardous to one's health? A meta-analysis. *Psychological Bulletin*, *129*, 946–972. doi:10.1037/0033-2909.129.6.946

Wallin, D. (2007). *Attachment in psychotherapy*. New York, NY: Guilford.

Wang, S. (2005). A conceptual framework for integrating research related to the physiology of compassion and the wisdom of Buddhist teachings. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 75–120). London, UK: Routledge.

Warneken, F., & Tomasello, M. (2009). The roots of human altruism. *British Journal of Psychology*, *100*, 455–471. doi:10.1348/000712608X379061

Weng, H. Y., Fox, A. S., Shackman, A. J., Stodola, D. E., Caldwell, J. Z. K., Olson, M. C., … Davidson, R. J. (2013). Compassion training alters altruism and neural responses to suffering. *Psychological Science*, *24*, 1171–1180. doi:10.1177/0956797612469537

Wesselmann, E. D., Williams, K. D., & Hales, A. H. (2013). Vicarious ostracism. *Frontiers in Human Neuroscience*. Advance online publication. doi:10.3389/fnhum.2013.00153

Whelton, W. J., & Greenberg, L. S. (2005). Emotion in self-criticism. *Personality and Individual Differences*, *38*, 1583–1595. doi:10.1016/j.paid.2004.09.024

Wilkinson, R., & Picket, K. (2010). *The spirit level: Why equality is better for everyone*. London, UK: Penguin.

Wilson, E. O. (1992). *The diversity of life*. London, UK: Penguin.

Zuroff, D. C., Santor, D., & Mongrain, M. (2005). Dependency, self-criticism, and maladjustment. In J. S. Auerbach, K. N. Levy & C. E. Schaffer (Eds.), *Relatedness, self-definition and mental representation. Essays in honour of Sidney J. Blatt* (pp. 75–90). London, UK: Routledge.