Mindfulness

Commentary Regarding Wilson et al. (2018) "Effectiveness of 'Self-Compassion' Related Therapies: A Systematic Review and Meta-analysis." All is not as it seems

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Abstract:	This commentary paper reviews the recently made claims by Wilson, Mackintosh, Power and Chan (2018) from their meta-analysis of what they call self-compassion therapies. They argue that a range of different therapy modalities can be classified as self-compassion therapies, including Compassion Focused Therapy, Dialectical Behaviour Therapy, Acceptance and Commitment Therapy and Mindfulness Based Interventions. The results from their meta-analyses found that these self-compassion therapies were effective at increasing self-compassion and reducing depressive and anxiety symptoms. This meta-analysis also found that self-compassion related therapies did not produce better outcomes than active control conditions. This indicates that such self-compassion therapies are unlikely to have any specific effect over and above the general benefits of any active treatment. We will indicate a number of reasons why this conclusion is not warranted. We first contextualise what is meant by compassion focused therapies, we then discuss four key concerns: (1) the heterogeneity and classification of the 'self-compassion therapies'; (2) the measure used to assess self-compassion; (3) the comparison to the active control conditions; and (4) the inaccurate comments made about the Kirby, Tellegen, & Steindl (2017) meta-analysis. Although it is encouraging to see the increasing number of randomised controlled trials and now meta-analyses of compassion focused therapies, the conclusions made by Wilson et al (2018) in their meta-analysis are not warranted.

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Commentary Regarding Wilson et al. (2018) "Effectiveness of 'Self-Compassion' Related Therapies: A Systematic Review and Meta-analysis." All is not as it seems.

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Abstract

This commentary paper reviews the recently made claims by Wilson, Mackintosh, Power and Chan (2018) from their meta-analysis of what they call self-compassion therapies. They argue that a range of different therapy modalities can be classified as self-compassion therapies, including Compassion Focused Therapy, Dialectical Behaviour Therapy, Acceptance and Commitment Therapy and Mindfulness Based Interventions. The results from their meta-analyses found that these self-compassion therapies were effective at increasing self-compassion and reducing depressive and anxiety symptoms. This meta-analysis also found that self-compassion related therapies did not produce better outcomes than active control conditions. This indicates that such self-compassion therapies are unlikely to have any specific effect over and above the general benefits of any active treatment. We will indicate a number of reasons why this conclusion is not warranted. We first contextualise what is meant by compassion focused therapies, we then discuss four key concerns: (1) the heterogeneity and classification of the 'self-compassion therapies'; (2) the measure used to assess self-compassion; (3) the comparison to the active control conditions; and (4) the inaccurate comments made about the Kirby, Tellegen, & Steindl (2017) meta-analysis. Although it is encouraging to see the increasing number of randomised controlled trials and now meta-analyses of compassion focused therapies, the conclusions made by Wilson et al (2018) in their meta-analysis are not warranted.

Keywords: compassion; compassion focused therapy; self-compassion; meta-analysis

Commentary Regarding Wilson et al. (2018) "Effectiveness of Self-Compassion Related Therapies: A Systematic Review and Meta-analysis." All is not as it seems.

Recently, Wilson, Mackintosh, Power and Chan (2018) published the results of a systematic review and meta-analysis of what they called '*self-compassion related therapies'*. The authors concluded that their strangely grouped body of therapies called 'self-compassion therapies' did not add any benefits over and above other therapies. We would strongly urge individuals to think carefully about this conclusion and its implications, because as we will argue below, this conclusion is far from warranted

Overall, 22 randomised controlled trials were including in their analyses (*n* = 1,272), examining different (called) 'self-compassion' related therapies, such as compassion focused therapy (e.g., Kelly & Carter, 2015), mindfulness-based cognitive therapy (Kuyken et al., 2010), emotion-focussed therapy (Cornish & Wade, 2015), mindfulness-based stress reduction (Jazaieri et al. 2012), loving-kindness meditations (Shahar et al. 2015), and acceptance and commitment therapy (Yadavaia et al., 2014). Many of compassion focused therapies are not specifically *self*-compassion focused but include compassion to others and from others (Gilbert 2014; Gilbert, Catarino, Duarte, et al., 2017; Gonzalez-Hernandez, Romero, Campos, et al; 2018 (see their Module V); Pace, Negi, Dodson-Lavelle et al., 2013). Importantly, mindfulness-based cognitive therapy has argued against introducing specific compassion focused trainings within the mindfulness program (Kuyken personal commination 2013).

These issues bear on the basic view of human nature, that mindfulness practitioners hold, which is also reflected in very old debates in Western philosophy. For example, Jean-Jacques Rousseau (1712—1778) argued strongly that humans are basically good but are corrupted by their social contexts. This fits with the idea that the more mindful we become the more compassion will naturally arise to become a way of living, and specific compassion trainings are not necessary. In direct contrast the English philosopher Thomas Hobbes (1588-1679) argued the opposite, that humans are basically selfish and aggressive and require careful regulation to ensure civil society. Evolutionary theorists argue that it is not about whether there is *a basic nature* or not but that we have a range of basic motives such as for self-protection, resource acquisition, sexuality, group belonging and so on. These different motives can at times be in conflict within us (Huang, & Bargh, 2014). They evolved from the challenges of survival and reproduction and can orientate us to be helpful or the harmful according to historical and current social contexts (Gilbert, 2005). Moreover, many of our motives are unconscious to us and that root may have selfish aims (Huang, & Bargh, 2014).

Unfortunately, the last 4,000 years of human history of wars, ethnic cleansing the Roman games, the Holocaust, torture, slavery not to mention our histories as a predator nearly wiping out other species and now engaged in the most horrendous factory farms involving many billions of animals, suggests that alongside our capacity for extraordinary compassion and self-sacrifice for others, humans are also potentially one of the nastiest, callous and most dangerous of species. We are also destroying our own ecologies and that of other living things on this planet. Our brains, like the brains of other species are full of many different conflicting potentials and motives that evolved from the challenges of reproduction and survival (Huang, & Bargh, 2014). But we also have a new brain which allows us to have *knowing awareness* insight and can begin to make choices. Hence the essential importance of mindfulness and developing inner awareness of the 'productions' from brains and minds. In addition, it is what we deliberately and wisely cultivate individually, in our groups, communities and nations that are the crucial issues for the future well-being of us all (Ekman & Ekman, 2017; Gilbert 2005; 2009, 2018). Hence, CFT like other compassion focused therapies, but perhaps for other reasons, highlights the importance of *specifically* cultivating compassion and its competencies, specific trainings such as empathy, distress tolerance, moral reasoning and so on (Jinpa 2015; Kemeny, Foltz, Cavanagh, et al, 2012; Pace et al., 2013; Ricard, 2015; Valk et al., 2017; Weng et al., 2013; Weng, Lapate, Stodola et al., 2018).

Within the field then there are very important differences of orientation and approach that should not be underestimated when combining quite different types of therapy with different underpinning epistemologies. Evolutionary based compassion focused approaches have quite different views about 'the nature of human nature' with major differences about what is required to enable humans to become compassionate to themselves, to others, including those in the group that live over the hill, and ecologies in which we live.

We also note that this meta-analysis of RCTs included a waitlist control and a range of different active control comparisons. Interventions in the active control comparison included: trauma focused cognitive-behaviour therapy (Beaumont et al., 2016); in-vivo exposure (Hoffart et al., 2015), combination of cognitive-behaviour therapy and dialectical behaviour therapy (Kelly et al., 2017), maintenance of medications such as anti-depressants (Kuyken et al., 2010), exercise regimes (Jazaieri et al., 2012), online self-help CBT (Armstrong & Rimes, 2016), and biofeedback with abdominal breathing (de Brion et al., 2016). The results of their meta-analysis concluded that 'self-compassion' therapies produced moderate effect sizes on the three outcomes of interest: self-compassion, anxiety, and depressive symptoms. However, when the RCT design included a self-compassion therapy against an active control comparison there was no significant differences on any of the three outcomes of interest. The authors concluded that self-compassion therapies do not bring about improvements in self-

compassion and psychopathology over and above other interventions. This is a very serious conclusion, with obvious consequences, is far from warranted and is based on some fundamental errors.

While we are delighted that there is an increasing interest in understanding the links between compassion and mental health, and we very much want to support this, it's important to point out the serious concerns about the quality, focus, and conclusions of the study. Here are our major concerns: (1) the heterogeneity and classification of the 'self-compassion therapies', and the search terms used; (2) the measure used to assess self-compassion; (3) the comparison to the active control conditions; and (4) the inaccurate comments made about the Kirby, Tellegen, & Steindl (2017) meta-analysis. We will discuss each of these concerns below. We hope this will provide clarification on the state of compassion-based interventions.

Setting the background

Before beginning our critique, it is important to place the emergence of compassion focused therapies in their context. In the last 20-30 years, partly linked to movements such as positive psychology (Seligman & Csikszentmihalyi, 2000), interest in the contemplative traditions that places compassion central to well-being and ethics (Ekman & Ekman 2017; Jinpa, 2015; Ricard, 2015; Sinnott-Armstrong & Miller, 2017), and the essential role that compassion and caring has on early life and how it influences human development (Siegel, 2015), there has been an explosion of interest in prosocial behaviour (Bierhoff, 2005; Brown, & Brown, 2015; Davidson, 2012; Jinpa 2015; Kemeny, Foltz, Cavanagh, et al., 2012; Penner, Dovidio, Piliavin & Schroeder, 2005; Ricard, 2015; Weng et al.,2013). There have been a number of studies on contemplative practice and compassion-based interventions demonstrating how compassion can help others and oneself (Kemeny, et al., 2012; Leaviss, & Uttley, 2015; Kirby, 2016; Neff & Germer, 2013; Poulin, 2014; and for reviews see Seppälä, Simon-Thomas, Brown, Worline, Cameron & Doty, 2017; Singer, & Bolz, 2012). Among the dimensions of prosocial behavior that have been explored are altruism (Preston, 2013; Ricard, 2015), empathy (Decety, Bartal, Uzefovsky, & Knafo-Noam (2016), morality and ethics (Sinnott-Armstrong, & Miller, 2017); cooperation (Tomasello & Vaish, 2013), caring (Gilbert 1989; Mayseless, 2016), and compassion (Gilbert, 2005; 2017a; Seppälä et al., 2017; Singer & Bolz, 2012). Today there is considerable evidence that receiving compassion and care during early life impacts epigenetic development (Cowan, Callaghan, Kan, & Richardson, 2016), a range of physiological and neurophysiological systems (Mascaro, Darcher, Negi, & Raison, 2015), such as the immune system (Pace et al., 2009; 2013), brain development (Siegel, 2015), and various psychological processes including emotion regulation and self-confidence (Mikulincer & Shaver, 2016). The reasons for these extraordinarily powerful impacts on this

range of processes lies in the evolution of brain mechanisms underpinning caring behaviour and attachment (Carter, Bartel, & Porges, 2017; Gilbert, 1989, 2015, 2017b; Mayseless, 2016).

In regard to compassion focused interventions there are many. For example, there is evidence that loving-kindness meditation, which typically focuses on directing wishes of goodwill to self and others including '*difficult*' people, has many beneficial effects (Mascaro, et al., 2015; Weng et al., 2017). Weng, et al., (2013) found that two weeks of compassion training (focusing on benevolent wishes for family, friends and difficult people) resulted in increased altruistic behaviour in a fairness giving scenarios, and changes in neurophysiological mediators. Matos et al., (2017) found that practising compassionate mind skills for two weeks resulted in a range of beneficial psychological changes, reduced fears of compassion and was associated with well-being and changes in heart rate variability. Compassion focused therapy (CFT) and compassionate mind training (CMT) are designed to tap into the physiological and neurobiological systems that underpin evolved caring mechanisms (Gilbert, 2014, 2017b); hence why changes in heart rate variability (Kirby, Doty, Petrocchi, & Gilbert, Matos et al., 2016) and neurobiological changes associated with training (Vrtička, et al. 2017; Valk et al., 2017; Weng et al., 2018) are of interest.

In fact, there have been numerous studies on the neurophysiological changes associated with loving-kindness and compassion meditations (a number of reviews can be found in Seppälä, et al., 2017, also Galante et al., 2014; Hoffman et al., 2010). To mention just one, Vrtička, et al., (2017), and Valk, et al., (2017) compared three forms of training linked to: 1) attention and mindfulness; 2) socio-effective (including compassion training); 3) socio-cognitive (including metacognition, empathy and perspective training) (see also,. These trainings all produced neurophysiological changes but importantly they differed according to the training type engaged in. This indicates that these different types of trainings are not neurophysiologically equivalent (Vrtička, et al., 2017; Valk et al., 2017). To put this another way trainings are subtle and need fine tuning.

Many researchers and clinicians are now trying to work out which interventions help which people in which contexts and influence which physiological processes (Gilbert, 201; 2017ab). This is important because compassion training for non-clinical populations is likely to be different than for clinical populations. For example, clinical populations are much more likely to have a range of complex, conscious and unconscious, fears, blocks and resistances to compassion (Gilbert, 2000, 2009; Gilbert, McEwan, Matos & Rivis, 2011; Gilbert & Mascaro, 2017). Individuals suffering from clinical disorders are likely to have more disruptive attachment experiences, from traumatised histories, and find compassion a struggle (Lawrence & Lee, 2014). Inexperienced therapists trying to instigate compassion can inadvertently activate attachment processing systems and thereby

stimulate trauma memory or at times overwhelming grief (Gilbert, 2009; Gilbert & Procter, 2006). Other clients such as those with narcissistic disorders can be quite resistant for various reasons (e.g., not seen as useful or helpful). Some clients can be compassionate to themselves but not to others, others can find giving compassion to others easy, but difficult to themselves (Gilbert, 2009; in press). Hence, one cannot assume that one can take an intervention that works well with a non-clinical population and transfer it into a clinical population.

Currently, the translation from understanding the processes that underpin compassion (e.g., physiological pathways) and translating that into therapy is in its early days. In addition, some of the methodologies of research trials are poor, the training and supervision of the therapists uncertain, and fidelity to the model rarely clarified (Kirby, et al., 2017). This is not a criticism of just compassion therapies, but also a common problem for all therapies (Cuijpers, Cristea, Karyotaki, Reijnders, & Huibers, 2016). Understandable enthusiasm must therefore be held in check until much more rigorous studies are forthcoming. Indeed, the conclusions of this type of meta-analysis are premature because many of the studies used are poor quality, specifically in regard to identifying and ensuring that compassion interventions were correctly conducted and the fears, blocks and resistances, so common in clinical populations, were addressed. Many of the studies are essentially small-scale proof of concept, which was also the same for the Kirby, et al., (2017) meta-analysis. These are important first steps in which much can be learned but they are really first steps. So it would be something of a tragedy if against the extraordinary developments in the science of prosocial behaviour and compassion in general this type of meta-analysis was taken to indicate that compassion is not worthy of developing as a therapy. We now turn to the more specific issues.

Heterogeneity and classification of the ‘self-compassion therapies’, and search terms used

Although the authors use the term *self-compassion* focused, we are not sure what this applies to specially. A lot of the compassion interventions included are not specifically self-compassion focused and those that are, such as Neff & Germer’s Mindful Self-Compassion program (Neff & Germer, 2013), were not included in the meta-analysis. This seems to be because MSC, despite being an internationally acclaimed intervention, was not originally defined as a therapy, but rather a program for the general public.

So let’s come back to a core issue that Wilson, Mackintosh, Power and Chan’s search is very wide and are not particularly compassion focused, despite being called ‘self-compassion therapies’. For example, the following keywords were used:

‘‘compassion focused therapy’ or ‘compassionate mind training’ or ‘mindful self-compassion’ or (‘mindfulness based’ or ‘MBCT’ or ‘MBSR’ or ‘acceptance and commitment therapy*’ or ‘ACT’ or*

'dialectical behaviour therapy*' or 'DBT' or 'intervention' or 'treatment' and 'self-compassion' or 'self-kindness').*

At no point did the authors discuss the criteria for choosing the compassion focused intervention in contrast to a mindfulness intervention other than a keyword search. Indeed, as noted previously, there are notable and important physiological differences in mindfulness versus compassion training (Valk et al., 2017). Many of their keywords did not actually include compassion (e.g., dialectical behaviour therapy). Seriously problematic, therefore, as stated in the paper in Table 3, most of the studies are actually mindfulness-based studies (n = 13) not compassion studies (n = 8). Indeed, based on reviewing the included interventions, MBCT is the most included 'self-compassion therapy' with eight intervention studies, and MBSR having four studies included. We would strongly argue that neither MBCT nor MBSR can be considered a self-compassion therapy, rather they form mindfulness-based interventions, for which there are many meta-analyses (e.g., Khouery et al., 2011). Keep in mind that mindfulness and compassion training have quite different impacts on neurobiology (Vrtička, et al., 2017), and currently there are a few studies that directly compare them. Although the interventions themselves may include the Self-Compassion Scale (Neff, 2003) as part of their evaluation, this does not make the intervention primarily compassion focused. Oddly, the authors state in the study characteristics section that, "*Of the 22 RCTs included in the review, 13 evaluated mindfulness-based therapies, 1 a day-long ACT workshop and 8 compassion-based interventions.*" So this raises the question as to why these different interventions are being grouped as a 'self-compassion therapies'.

The authors also note the high variability in the what they are calling self-compassion studies. As noted above, we are in the early stages of development and training of compassion focused therapies; that is compassion focused interventions that are designed for, and with, clinical groups. Some are just a few sessions (e.g., Kelly & Carter, 2015), some are simply short-term self-help interventions (e.g., Duarte et al. 2017), whereas others are more face-to-face (Beaumont et al., 2016). In addition, the authors confound individual with group focused therapies. Many of these interventions are proof of concept with small numbers (e.g., n = 16; Arimitsu, 2016), along with well-developed RCTs (e.g., Eisendrath et al., 2016). As with any new intervention or therapy model, many of the published evaluation studies begin by having a waitlist or no control comparison conditions (Sanders & Kirby, 2014), and that is also true for mindfulness-based interventions, as well as compassion-based interventions. This is a problem in the literature more generally (see Kazdin, 2016), which the authors do not discuss.

Thus, given this great heterogeneity in the included studies of self-compassion therapies, how can one reliably state that this is an accurate reflection? To determine the effectiveness of a self-compassion therapy we would not interpret the results from an RCT examining MBCT or MBSR to provide an indication of the state of evidence. Moreover, without providing an operational definition of what the authors mean by 'self-compassion therapies' it makes it extremely difficult to determine how studies were judged. The closest operational definition we could find was, *"Based on the similarity between self-compassion and the underlying constructs in MBCT, DBT and ACT, it is reasonable to view these different interventions as part of a family of self-compassion-related therapies that could be evaluated as a group."* We disagree. The evidence simply does not support this. As we noted not only are their major distinctions between interventions designed for clinical and non-clinical populations but we are learning that there are very subtle but important differences between mindfulness versus compassion versus empathy training approaches (Vrtička, et al., 2017). Moreover different client groups will respond to these interventions quite differently. Therapists will need to be skilled enough to work with those individual differences.

While DBT is an excellent therapy for people with personality difficulties (e.g., borderline personality disorder), with good data supporting it (Linehan, et al., 2015), and radical acceptance has some overlap with compassion, it is mainly a skills training along four dimensions of: mindfulness, interpersonal effectiveness, emotion regulation and distress tolerance (Linehan, 2015). Along the course of the therapy, compassion, kindness, forgiveness will texture these processes. However, they are not *the focus* of the therapy. Similarly, Acceptance Commitment Therapy ACT is another excellent therapy with good data supporting it (A-Tjak et al., 2015; Ost, 2014), but it is rooted in a particular contextual behavioural model of therapy not motivation theory and not compassion motivation cultivation. Rather it is centred on concepts of relational frame theory and the hexaflex which consists of present moment awareness, acceptance, cognitive diffusion, self as context, values, and committed action (Louma & Hayes, 2017). Each of these contributes to psychological flexibility. Compassion may well be one of the values texturing ACT, and some have made efforts to enable ACT to integrate CFT and other compassion interventions (Tirch, Schoendorff, & Silberstein, 2014). However in a recent manual (Luoma, & Hayes, 2017) compassion is not discussed as a central training focus and is not even entered in its extensive index.

In contrast there are other approaches such as Compassion Focused Therapy (CFT) and where compassion training *is* at the very core of the therapy. CFT is derived from evolutionary models of care-giving, identifying particular physiological systems that therapy should target (Kirby et al 2017). It offers a psycho-educational evolutionary model, highlighting the nature of motivational and emotional conflict within the mind (Gilbert 2000)

(as does many psychodynamic approaches). It focuses on the link between internal working models of attachment and compassion, and how and why creating compassionate mental states has such powerful emotion, physiological regulation potential (Gilbert, 2010). Central is creating a compassionate mind, which is about how the mind and brain is patterned at any point in time using combinations of breathing, attention awareness, and motivational focusing. Central too is cultivating the compassionate identity that is focused on *living to be helpful not harmful to self or others,* which of course is similar to the concept of Bodhicitta, (Dalia Lama 1995; Tsering 2005). These two central tenants which are returned to time and time again is absent from many other therapies. Across the course of CFT specific techniques are introduced, including, mindfulness, empathy training, distress tolerance, interpersonal relating (including assertiveness training), body and breathing practices, mindfulness and attention training practices, behavioural exposure practices, metacognition, imagery, and visualisation practices (Gilbert & Choden, 2013; Kirby, 2016).

Suffice it to say that that to include all these very different therapies as the same therapy models of the self-compassion family is extraordinary to say the least. Extending this logic, given CFT includes mindfulness does that therefore mean CFT is part of the dialectic family therapies? The study by Kelly et al., (2017) is an interesting inclusion, as the active comparison control intervention was a combination of CBT/DBT, which would therefore make it a 'self-compassion therapy'?

So what about the therapies and interventions that are specifically compassion focused, where the primary aim is to stimulate compassionate motivation. The authors state that "*Compassion-focussed therapy (CFT) is the intervention that most explicitly aims to modify self-compassion"* – compared to what? No other interventions are mentioned as a comparison. Cognitive-based compassion training is also a well-developed marginalised compassion therapy e.g., Pace et al 2013; Gonzalez-Hernandez et al., 2018) Moreover, many of the emerging cognitive focused therapies are *not* a specifically *self*-compassion focused intervention (though some therapy researchers sometimes focus on just that one aspect). Rather increasingly the cognitive focused psychotherapy address different combinations of the triangular flows of compassion: 1) the ability to receive compassion from others, 2) give compassion to others, and 3) self-compassion. This is partly because there is evidence to suggest that the ability to receive compassion is important therapeutic (Gilbert 2009b; Gilbert & Procter, 2006), with evidence suggesting that in some contexts, and for some people, it may be more important than self-compassion (Hermanto, Zuroff, Kopala-Sibley, Kelly, Matos, & Gilbert, 2016; Hermanto, & Zuroff, 2016).

Within the therapeutic relationship, therapies have always been aware that clients can struggle with the ability to experience their therapists' compassion, sometimes filling at their core to be unlovable or undeserving

of compassion (Mearns & Cooper, 2019). These fears and resistances take some time to soften and may require working with very attachment disturbances. In addition there are some therapies that focus on helping people become more empathic and compassionate to others (Greenberg, 2010). In fact empathy training as in mentalising training (Bateman & Fonagy, 2008) can play a fundamental role in compassion focused therapy (Gilbert 2010). This is particularly true for those individuals who have more self-centred and/or narcissistic type difficulties. So CFT focuses on compassion as a *flow* of compassion and sees compassion as a social mentality (Gilbert, 2017b). Indeed, compassion *focused* therapy is not the same as 'compassion therapy' because CFT is about how to focus a variety of interventions through compassion motivation. Individuals can engage in all kinds of change processes including cognitive restructuring or behavioural exposures for example but if the underlying motivation and emotion is hostile or fearful rather than compassion focused it is less likely to be effective. Psychotherapies can't afford to be one club golfers and they must address underlying physiological change processes too.

In regard to the other therapies and interventions, Mindful Self-Compassion (Neff & Germer, 2003) is arguably the most specifically focused on self-compassion. However, as mentioned, it was never designed as a therapy, nor is it taught around the world as a therapy, and in fact was excluded from the analysis. Of the compassion training protocols only one other specific compassion as a therapy model is Cognitively-Based Compassion Training. Interestingly the authors only included three of the 21 RCT studies included in the meta-analysis by Kirby, et al. (2017), and did not include the following compassion-based programs, Mindful-Self-Compassion, Compassion Cultivation Training, or Cognitively-Based Compassion Training, all of which have been evaluated in RCT designs. They were all excluded as the authors were only interested in samples that:

"*We required the intervention to include at least one face-to-face session with a trained therapist. The study population had to consist of adults of 18 years and over who had a clinical or subclinical mental health problem, as assessed by formal clinical diagnosis or by a validated self-report measure. Self-compassion is relevant to a range of mental health problems, so this review was not restricted to any specific diagnosis*."

This is surprising because Cognitively-Based Compassion Training is designed as a therapy and has been used in studies of mental health difficulties (Dodds et al., 2015; Gonzalez-Hernandez et al., 2018), and also with University students, and finally with adolescents in foster care – although this population was outside of the eligibility criteria (Pace et al., 2010). In addition, we would argue that one face-to-face session with a trained therapist, party constitutes a therapy. It would of course be wonderful if one session therapies had such powerful impacts, but unfortunately, we know of none.

The measurement used to assess self-compassion

The authors seem unaware of the controversies and important discussions around the definitions of compassion and of self-compassion. Neff (2011) has pioneered her own definition based on three bipolar constructs:

"Self-compassion.....involves being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness. Self-compassion also involves offering non-judgmental understanding to one's pain, inadequacies and failures, so that one's experience is seen as part of the larger human experience (p.87)."

Neff also went on to suggest that her model of self-compassion can be assessed using three bipolar dimensions: self-kindness (in contrast to self-judgment and self-criticism); shared common humanity (in contrast to feeling isolated and alone and the only one) and mindfulness (in contrast to self-absorption and rumination). The self-compassion scale measures these six dimensions.

The authors note some of the problems with the measure when used as a total score because of half of its items that known psychopathology linked items that as self-criticism and therefore it will inflate the link between 'compassion' and psychopathology (López, Sanderman, Smink, et al., 2015; Muris & Petrocchi, 2016). Despite these important scientific controversies the authors still decide to use the Self-Compassion Scale as ***the criteria*** for deciding if self-compassion therapies are improving compassion. At best it can only be a measure of that particular definition of compassion. But the inclusion of three dimensions that are clearly linked to psychopathology is important for another reason. This is because clinicians have known for a long time that certain types of shame, rumination and self-criticism can be quite difficult to treat, particularly if linked with trauma. There are many forms of shame and self-criticism, many resistances within them, and any therapy that seeks to address them will need to understand these dynamics. Currently the self-report measuring of compassion is in its infancy and different measures are appearing constantly. Some are more focused on motivation others on various competencies of compassion and we are yet to learn which may be more useful in which context, but it's unlikely that the one size will fit all (Gilbert et al., 2017; Jazaeiri et al., 2013; Kirby, et al., 2017).

Clinically, it is also important to recognise that clinicians are aware that as people begin to engage in therapy their self-reported state of mind (e.g., emotions and beliefs) might start to get worse. This is partly because the individual begins to engage with things that previously they may have been in denial or dissociation about (e.g., inner rage or grief). For example, some people will deny they are self-critical or feel lonely and it's not until they are well into therapy that these themes start to emerge (Gilbert, 2010). All psychotherapies have this problem of individuals who will score in a particular way on a self-report scale but then after some duration of therapy

start to reveal a different story and experience increased distress. This also raises the serious issue that therapies that are too short may start individuals off along the road to self-discovery and engaging with difficult material, but then not have the time to produce therapeutic change. This is why we would be very suspicious of therapies that tried to rush people through. This is the elephant in the room of psychotherapy research.

The comparison to the active control conditions

Another problematic aspect of the study were interventions classified as 'self-compassion therapies' we would not define as such, for example, one specific intervention (Cornish & Wade, 2015) was focused on self-forgiveness based in Emotion Focused Therapy, yet is has been defined as a compassion focused therapy equivalent. The Cornish & Wade (2015) study do not reference or cite compassion focused therapy in the whole manuscript. In addition, there is no outline of what the core features of the compassion focused intervention is, for example, there is no focus on developing a compassionate mind (Cornish & Wade, 2015). Forgiveness is one of the interventions for compassion but one develops compassion in order to become forgiving. How then did the authors conclude that this was a CFT equivalent therapy? This is not a criticism of Cornish and Wade (2015), but rather an inaccurate classification of an intervention as being a self-compassion focused therapy.

Moreover, in the intervention descriptions it becomes clear many of the interventions classified as 'self-compassion therapies' are not – indeed, the authors even state that in the study characteristics section hat 13 are mindfulness-based therapies (MBCT, MBSR), thus why should there be a difference between intervention and active controls on the SCS (Neff, 2003), given that neither intervention was specifically trying to enhance compassion as a core aspect. For example, the de Bruin et al (2016) intervention was self-led mindfulness, whereas the comparison was biofeedback with abdominal breathing or an exercise regime. Why should there be differences on the SCS between these two groups? But importantly we now know that certain kinds of breathing exercises do facilitate compassion (Bornemann, Kok, Böckler & Singer, 2016) The Falsafi (2016) study had an intervention that was focused on mindfulness and loving-kindness meditations, and the control was a yoga intervention, again why should there be differences on the SCS comparing these two interventions? Some would argue that yoga includes compassion as a feature (according to the Yoga Sutras, one way to purify the mind and increase serenity is to practice compassion (karuna) in the face of suffering), and indeed in the Cultivating Emotional Balance program, which aims to cultivate compassion, yoga is one of the techniques in the program (Kemeney et al., 2011). Indeed, increasingly because of our deepening understanding of the relationship between mind and body interventions, yoga is being used to develop self-compassion including in the context of trauma (Crews, Stolz-Newton, & Grant, 2016).

The study also concludes that:

"*This meta-analysis also found that self-compassion related therapies did not produce better outcomes than active control conditions. This indicates that such therapies are unlikely to have any specific effect over and above the general benefits of any active treatment. We should therefore be cautious about claiming that it is possible to 'target' self compassion in therapy. Instead, it would seem that self-compassion is one of the many psychological characteristics that are modifiable during the course of a range of therapies. "*

We hope we have made clear that this somewhat dismissive statement is problematic and would be tragic if taken at face value. Many of the interventions included did not specifically seek to enhance self-compassion, why then should it increase significantly more compared to other active controls?

The inaccurate comments made about the Kirby, Tellegen, & Steindl (2017) study

The authors cite a meta-analysis that Kirby was the lead author on often in the manuscript, as it was one of the first examining compassion-based interventions in a meta-analysis. However, the manuscript makes inaccurate statements about this published article. For example, the author's state, "*While Kirby et al. (2017) exclusively reviewed CFT, a focus on self-compassion is not restricted to one modality of therapy*." This is inaccurate. The Kirby et al. (2017) meta-analysis included a range of interventions not exclusively Compassion Focused Therapy, it included Mindful Self-Compassion, Compassion Cultivation Training, Cognitively Based Compassion Training, and others. Importantly, most of these programs are not 'therapies', they are intervention programs commonly developed for self-help, self-improvement and better coping with life (MSC, CCT). And they are not all based on CFT – indeed the underpinning theory of each of these different programs is different (see Kirby, 2016 or Kirby & Gilbert, 2017), thus they are most certainly not the same homogenous group of intervention. Indeed, we think this is a good thing because it offers opportunities for scientific study of variation, discussion of differences, and opportunities to grow, develop and learn from each other. Thus, although we are critical of Wilson et al (2018) meta-analysis for the heterogeneity of included studies, we also would level this same criticism against the Kirby et al. (2018) meta-analysis.

Concluding Remarks

In the field of meta-analysis it is well-known that the quality of the analysis depends upon what you include. So we have tried to outline reasons why we have concerns about the inputs to the study, and hence this meta-analysis. The selection criteria for studies is difficult to understand, the concept used to consider what compassion is and isn't is not adequately discussed, the measure used was not originally developed for clinical populations, even though it is now being used in clinical populations. Given the international explosion of

research into compassion, and prosocial behaviour and mind states, it would be truly tragic if this kind of meta-analysis was taken to dissuade individuals from developing and researching how to facilitate compassion as a therapeutic and healing process.

We would also suggest that, like medicine, considerable research goes into process before active therapies gradually begin to emerge. We knew a lot more about the heart before we were able to do successful heart transplants. We are learning a lot about compassion including its genetics, epigenetics, neurobiology, psychological and motivational orientation, and contextual regulators. The translation of this process knowledge into therapy will not be quick. Just one example. We know there are major differences on the oxytocin gene that are linked to prosocial behaviour and stress reactivity (Rodrigues, Saslow, Garcia, John, & Keltner, 2009). What we don't know is how different therapies may interact with different genetic profiles. Compassion focus therapies are interested in these questions because most of them seek to be a bottom-up scientific process to therapy. Kirby and Gilbert (2017) have highlighted the fact that many psychotherapies were based upon observations by charismatic therapists who then created schools around them to focus on processes they identified as being important. Research would be then directed to the processes identified. Unfortunately, this has led to considerable fragmentation and a lack of a coherent integration for psychotherapy. This is why we now have some hundreds of schools of psychotherapy.

As noted in our introduction there is a rapidly growing science base indicating the benefits of cultivating prosocial motivation (e.g., Seppälä et al., 2017). How these fast developing scientific insights get translated into core psychological processes gets translated into therapy is the next step. It is heartening that even though these are newly developed therapies they are doing as well as standard therapies (e.g., CBT/DBT). Moreover, because many therapies do not measure pro-sociality, and other aspects of compassion including our ability to receive it, feel gratitude and be orientated to help others, we do not know the impacts these therapies are having on prosocial behaviours in general. Importantly however when it comes to relapse prevention, and many therapies are not great relapse prevention (Cuijpers et al 2016) it may well be that changes in social behaviour, so individuals are able to develop and maintain open, supportive relationship with others, turns out to be a key factor. It is not just the regulation of our own minds but recognising how we operate within in social networks that important (Siegel, 2015). Increasingly mental health workers are highlighting the fact that we are not autonomous individuals and cannot have mental health without social health. There is an increasingly urgent orientation in the field of mental health, for alleviation and prevention, to see our minds as highly socially embedded, and that right down to the epigenetic level we are being regulated through our relationships with

others both consciously and unconsciously (Haslam, Jetten, Cruwys, Dingle, & Haslam, 2018; Hobsbawn 2017). Compassion focused therapies therefore need to address the issue that we are not autonomous individuals but as evolved to be highly socially integrated and regulated (Gilbert 2018)

So we need longer-term follow-up studies to measure their impact on mental state, relapse rates, and social function. We need therapies that are better able to focus on psychological, epigenetic and neuro-scientific findings related to how the brain evolved and functions, particularly in relationship to affiliative processing systems (Brune & Brune-Cohrs, 2006; Conway-Slavich, 2017; Davidson, 2012; Gilbert 2014; Siegel, 2015; Shore & Shore, 2007). The evidence is overwhelming that affiliative and compassion relationships both with the self and others have powerful physiological and emotion regulating effects (e.g., Singer & Boltz, 2012; Seppälä et al., 2017). How this information can be translated into psychotherapies is in the early days, particularly given the fact that there can be considerable resistance to experiencing compassion. This is not surprising because compassion is about engaging with in a pain.

So even though we are enthusiastic about compassion as a therapy, as an education, and as a way of helping humans behave better to each other, we acknowledge that some of the studies are early studies with limited methodologies, lack clarity and process, and with very little control over fidelity to a model. Many new therapies suffer these problems. In addition, therapies are beginning to move towards more individually tailored interventions and the sooner we get away from ‘one size fits all’ the better our outcomes will be. We also highlight that the compassion focused therapies are often pluralistic, this is why they are called compassion *focused* therapies, not compassion therapies.

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