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Self-compassion as an emotion regulation strategy in major depressive disorder

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ABSTRACT

Cognitive reappraisal and acceptance are two presumably adaptive emotion regulation strategies in depression. More recently, self-compassion has been discussed as another potentially effective strategy for coping with depression. In the present study, we compared the effectiveness of self-compassion with a waiting condition, reappraisal, and acceptance in a clinically depressed sample, and tested the hypothesis that the intensity of depressed mood would moderate the differential efficacy of these strategies. In an experimental design, we induced depressed mood at four points in time in 48 participants meeting criteria for major depressive disorder. After each mood induction, participants were instructed to wait, reappraise the situation, accept their negative emotions, or employ self-compassion to regulate their depressed mood. Self-ratings of depressed mood were assessed before and after each mood induction and regulation phase. Results showed that the reduction of depressed mood was significantly greater in the self-compassion condition than in the waiting condition. No significant differences were observed between the self-compassion and the reappraisal condition, and between the self-compassion and the acceptance condition in patients' mood ratings. However, the intensity of self-rated depressed mood at baseline was found to moderate the comparative effectiveness of self-compassion and reappraisal with a trend of self-compassion being more effective than reappraisal in high depressed mood at baseline. These findings support the use of self-compassion as another adaptive emotion regulation strategy for patients with major depressive disorder, especially for those suffering from high levels of depressed mood.

Major depressive disorder (MDD) is one of the most prevalent (Kessler et al., 2005) and debilitating (Üstün, Ayuso-Mateos, Chatterji, Mathers, & Murray, 2004) mental disorders. In the last two decades, various authors have explored the role of deficits in adaptive emotion regulation (ER) as a putative risk or maintaining factor of this frequently recurring (Judd, 1997; Kupfer, 1991; Solomon et al., 2000) or even chronic (Keller et al., 1992) disorder (e.g., Berking, Ebert, Cuijpers, & Hofmann, 2013; Hofmann, Sawyer, Fang, & Asnaani, 2012). Thompson (1994) defined ER as "extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (pp. 27–28). The term *adaptive* ER usually refers to the application of strategies that allow the individual to cope with undesired emotions in a way that does not interfere with the attainment of personally relevant goals and the satisfaction of basic-needs (Bridges, Denham, & Ganiban, 2004; Grawe, 2007).

With regard to the assumed influence of deficits in adaptive ER on the development and maintenance of depression, Berking and Whitley (2014) hypothesized that such cause aversive affective states to persist longer and with greater intensity than desired by the individual, and also lead to the individual experiencing a loss of control over their feelings and hence to the impression that these feelings will continue to impair their well being. According to Teasdale and Barnard (1993), the appraisal of a situation as highly *aversive*, *uncontrollable* and *stable over time* results in the activation

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of depressogenic information processing schema which cue further negative affective states. In the absence of adaptive ER skills, a vicious cycle of undesired affective states and depressogenic appraisals of these states may develop and contribute to the development and maintenance of MDD (Lara & Klein, 1999; Teasdale & Barnard, 1993, pp. 168–175 and 212–214). Teaching patients effective ER skills can be assumed to interfere with this vicious cycle and help patients overcome MDD. However, at this point it is unclear which ER strategies are most effective for this purpose.

Cognitive reappraisal is a core therapeutic technique in cognitive behavioral therapy (CBT) which is a well evidenced psychological treatment in MDD (Butler, Chapman, Forman, & Beck, 2006). In the past decade, the dominance of the cognitive-behavioral paradigm was challenged by the so called third-wave in CBT (Hayes, 2004) which focuses on enhancing the patients' ability to accept and tolerate negative (affective) states (Hayes, 2004). Recently, the use of self-compassion has been proposed as another potentially adaptive strategy when coping with negative emotions (Gilbert & Procter, 2006; Neff, 2003). In the following paragraphs we will present a brief overview on these strategies as well as the available evidence for their efficacy in the context of coping with depression.

Cognitive reappraisal was defined by Gross and John (2003) as (mentally) "construing a potentially emotion-eliciting situation in a way that changes its emotional impact" (p. 349). Given the evidence for the relevance of negatively biased information processing in depression (Gotlib & Joormann, 2010; Gotlib & Krasnoperova, 1998; Teasdale & Barnard, 1993), cognitive reappraisal is hypothesized to correct these biases and thus reduce negative affect and associated symptoms in depression (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Beck, 1967). Acceptance has been defined as the "openness to internal experiences and willingness to remain in contact with those experiences even if they are uncomfortable" (Campbell-Sills, Barlow, Brown, & Hofmann, 2006, p. 1253). Given (a) that depressogenic information processing involves appraising one's current situation as aversive (Teasdale & Barnard, 1993, p. 212–214), (b) that such an appraisal can be assumed to be based on the comparison between a perceived current state and a desired state (Miller, Galanter, & Pribram, 1960), and (c) that depressed individuals often engage in counterproductive strategies to get rid of undesired emotions and depressive symptoms (such as rumination or suppression, see Aldao et al., 2010; Ehring, Tuschen-Caffier, Schnülle, Fischer, & Gross, 2010; Joormann & Gotlib, 2010; Papageorgiou & Wells, 2004) it can be hypothesized that acceptance is an adaptive ER strategy for depression as it lowers the desired state and hence also the appraisal of the current situation as aversive (Berking & Whitley, 2014).

Numerous studies show that deficits in reappraisal and acceptance play an important role in the development and maintenance of depression and that effectively employing both strategies may help reducing depression. For example, correlational studies indicate that cognitive reappraisal and acceptance are associated with fewer negative emotions and symptoms of depression in healthy populations (e.g., Aldao & Nolen-Hoeksema, 2010; Garnefski & Kraaij, 2006; Garnefski, Kraaij, & Spinhoven, 2001; Garnefski, Teerds, Kraaij, Legerstee, & van den Kommer, 2004; Gross & John, 2003; Shallcross, Troy, Boland, & Mauss, 2010) and in clinically depressed individuals (Barnow, Arens, & Balkir, 2011). Moreover, depressed individuals have been found to use reappraisal to a smaller extent than healthy controls (D'Avanzato, Joormann, Siemer, & Gotlib, 2013; Kuyken & Brewin, 1994). In a longitudinal study it has been shown that deficits in the use of cognitive reappraisal and acceptance predict subsequent depressive symptom severity in healthy individuals (Kraaij, Pruymboom, & Garnefski, 2002). Experimental studies have demonstrated that never-depressed and recovered-depressed individuals employed experimentally induced reappraisal equally successful (Ehring et al., 2010) and that recovered depressed participants experienced greater reduction of negative mood when they adhered to the instructions of an acceptance exercise than did participants who did not (Singer & Dobson, 2008). In still another experimental study in patients diagnosed with either depression or an anxiety disorder, acceptance was shown to be more effective in reducing negative affect than suppression (Campbell-Sills et al., 2006).

Self-compassion has recently been discussed as another important strategy to cope with negative emotions and depression, and has been defined by Neff (2003) in terms of three (bipolar) components: (a) self-kindness (vs. self-judgment), which is the ability to treat oneself with care and understanding as opposed to being self-judgmental and self-critical; (b) common humanity (vs. isolation), which refers to the recognition that imperfection and failures are normal and shared aspects of human-beings, as opposed to feeling alone when failing and being imperfect; and (c) mindfulness (vs. overidentification), which involves being aware of and accepting experiences as opposed to overidentifying with thoughts and emotions. Since self-critical individuals lack self-kindness, self-compassion (including its subcomponent self-kindness) has been stated to be an especially helpful ER strategy in self-critical individuals (Gilbert & Procter, 2006). Given the role of self-criticism as a risk and maintaining factor in depression (Brewin & Firth-Cozens, 1997; Flett, Hewitt, & Mittelstaedt, 1991; Marshall, Zuroff, McBride, & Bagby, 2008; Murphy et al., 2002; Rector, Bagby, Segal, Joffe, & Levitt, 2000; Sturman & Mongrain, 2005; Zuroff, Igreja, & Mongrain, 1990), self-compassion can be assumed to reduce negative emotions and depression.

With regard to the efficacy of self-compassion, research has shown that self-compassion is cross-sectionally associated with more positive emotions, less negative emotions, and less severity in depressive symptoms in healthy and clinical samples (for an overview, see Hofmann, Grossman, & Hinton, 2011 or MacBeth & Gumley, 2012; Neff & McGeehee, 2010; Neff, Rude, & Kirkpatrick, 2007). Moreover, in a study conducted by Krieger, Altenstein, Baettig, Doerig, and Grosse-Holtforth (2013), individuals with MDD have been found to report less self-compassion when suffering from negative emotions than healthy controls. Difficulties in being self-reassuring were also found to lead to depressive symptoms in a student sample (Gilbert, Baldwin, Irons, Baccus, & Palmer, 2006) and practicing self-compassion resulted in subsequent increases in happiness and subsequent decreases in depression in individuals at risk for depression (Shapira & Mongrain, 2010). Additionally, Kuyken et al. (2010) found in remitted depressed individuals that an increase in self-compassion (and mindfulness) during mindfulness-based cognitive therapy predicted less severe depressive symptoms 15 months after remission.

Given that observational studies provide limited information on the direction of causal pathways, it is of note that recently findings were published providing preliminary evidence that self-compassion can be effectively used in the treatment of mental health problems such as depression. For example, compassionate self-support is one of the seven skills taught and practiced in the Affect Regulation Training (ART; Berking, 2007; Berking & Schwarz, 2013; Berking & Whitley, 2014) and includes (a) self-compassion, (b) self-soothing and self-encouragement, and (c) active self-coaching. In a recent study, it was shown in individuals suffering from MDD that integrating ART into traditional CBT was associated with a greater increase of self-support and a greater reduction of psychopathological symptoms when compared to CBT alone (Berking et al., 2013). However, since the training incorporates