Cogn Ther Res (2009) 33:301–313
DOI 10.1007/s10608-008-9202-1

ORIGINAL ARTICLE

Soothing Oneself and Resisting Self-Attacks: The Treatment of Two Intrapersonal Deficits in Depression Vulnerability

Allison C. Kelly · David C. Zuroff · Leah B. Shapira

Published online: 17 July 2008
© Springer Science+Business Media, LLC 2008

Abstract Self-critical individuals are more likely to become and remain depressed (Blatt, *Experiences of depression: Theoretical, research and clinical perspectives*, American Psychological Association Press, Washington, DC, 2004). This vulnerability to depression may reflect the association of trait self-criticism with difficulties self-soothing and resisting self-attacks. The current study tested the impact of two self-help interventions designed to reduce depression by improving these two intrapersonal deficits. The first was designed to foster compassionate self-relating whereas the second was designed to foster resilient self-relating. Seventy-five distressed acne sufferers were assigned to one of three conditions: a self-soothing intervention, an attack-resisting intervention, or a control condition. The interventions consisted of daily imagery-based self-talk exercises inspired by Gilbert's (*Genes on the couch: Explorations in evolutionary psychotherapy*, Brenner-Routledge, Hove, 2000) social mentatlities theory and compassionate mind training (Gilbert and Irons, *Compassion: Conceptualisations, research and use in psychotherapy*, Brunner-Routledge, London, 2005). In two weeks, the self-soothing intervention lowered shame and skin complaints. The attack-resisting intervention lowered depression, shame, and skin complaints, and was especially effective at lowering depression for self-critics. Implications for the treatment of self-criticism and depression are discussed.

A. C. Kelly (✉) · D. C. Zuroff
Department of Psychology, McGill University,
1205 Dr. Penfield Avenue, Montreal, QC, Canada H3A 1B1
e-mail: allison.kelly@mail.mcgill.ca

L. B. Shapira
York University, Toronto, ON, Canada

Keywords Depression · Self-criticism · Self-soothing · Acne · Self-help · Personality vulnerability · Self-compassion · Psychotherapy

Indroduction

Depression is a pervasive mental health problem that impairs psychosocial, occupational, and physical functioning (Kessler et al. 2005). Most empirical studies on the causes of depression support a diathesis-stress model (Hammen and Garber 2001), suggesting that vulnerable individuals become depressed when stressful external factors exceed their personal resources for coping. In addition to examining genetic predispositions, depression research has given considerable attention to the investigation of personality vulnerabilities (Zuroff et al. 2004). The trait of self-criticism, in particular, is commonly implicated in the development and maintenance of depression. Self-critical individuals are more likely to become depressed (Blatt and Zuroff 1992), less likely to respond to treatments (Rector et al. 2000) and more likely to relapse when they do respond (Teasdale and Cox 2001).

Theoretical and empirical research suggest that at least two intrapersonal processes are intimately linked with both trait self-criticism and depression. These are: (1) the inability to soothe oneself (e.g., Blatt 1974; Blatt and Zuroff 1992; Gilbert et al. 2006; Linehan 1993), and (2) the inability to resist one's self-attacks (e.g., Blatt 1974; Gilbert 2005; Whelton and Greenberg 2005).

Soothing Oneself

Psychologists have long been interested in the relationship between early caregiver warmth and later self-soothing

(e.g., Blatt 1974; Bowlby 1980; Freud 1923; Kohut 1977). It is only recently, however, that self-soothing capacities have been operationalized and studied empirically. Neff (2003) developed a scale to assess trait self-compassion, defined as the tendency to be kind and understanding towards oneself (rather than critical) at times of failure and distress. Her measure of self-compassion was found to correlate positively with well-being and adaptive functioning, and negatively with depression and anxiety (Neff 2004; Neff et al. 2007a, b). Individuals who scored high on this trait were also found to experience less negative emotion following set-backs and less rumination following negative evaluations (Leary et al. 2007).

Lutz et al. (2008) recently found that compassion meditation, which uses imagery to cultivate feelings of loving kindness for oneself and others, alters brain circuitry in a way that could enhance long-term mental and physical well-being. Individuals who are depressed have been found to show great difficulty generating compassionate self-images (Gilbert and Proctor 2006). This inability to imagine a warm and compassionate part of self has been found to predict low scores on Gilbert et al.'s (2004) trait self-reassurance scale and high scores on trait self-criticism. In other studies, both of these traits uniquely predicted depression. In addition, low trait self-reassurance mediated the effects of self-criticism on depressive symptoms (Gilbert et al. 2006; Irons et al. 2006). Taken together, this literature suggests that improving the ability to self-soothe might be integral to the reduction of self-criticism and depression.

Resisting One's Self-Attacks

A second intrapersonal deficit associated with both self-criticism and depression is the inability to resist one's self-attacks. Whelton (2000) conducted a study in which individuals were asked to sit in one chair and imagine themselves sitting in a chair opposite to them; they were then asked to direct self-criticisms to this empty chair. He found that when asked to move into this empty chair and respond to their self-attacks, individuals who scored high on the trait self-criticism scale of the Depressive Experience Questionnaire (DEQ; Blatt et al. 1976) were more likely to react with submission. Furthermore, this was true no matter how objectively harsh and contemptuous their self-attacks were rated. Using the same procedure, Whelton and Greenberg (2005) found that when participants reflected on their self-attacks, high self-critics were more likely than low self-critics to accept their self-criticisms, feel weak and beaten down, and display shame and sadness. They were also less able to separate themselves from their inner criticisms and less likely to respond with expressions of anger or pride. Gilbert et al. (2006) found similar evidence of self-critics' low resistance to self-attacks. In response to set-backs, self-critical individuals proved more likely not only to self-attack but also to feel discouraged by their self-attacks and to struggle with dismissing images of what was termed "[their] hostile inner critic."

This inability to resist self-attacks appears to be depressogenic. Greenberg et al. (1990) found that individuals who could not counteract their self-criticisms, but instead submitted to and felt beaten down by them, were more likely to be depressed. Similarly, Gilbert et al. (2001) found that among depressed individuals, symptom severity was greater among those who experienced their negative thoughts as powerful and themselves as powerless against them. From a somewhat different standpoint, cognitive therapies for depression assume that individuals' belief in their negative automatic thoughts creates and perpetuates their depressed mood; challenging these thoughts is therefore thought to alleviate symptoms of depression (Beck et al. 1979; Padesky 1994; Tarrier 2006). In sum, difficulties resisting self-attacks not only characterize self-critics but also underlie their depression.

The Current Study

The current study sought to test whether interventions designed to improve either self-soothing or resistance to self-attacks would be effective at lowering depressive symptoms, particularly for self-critics. We therefore developed two self-help interventions based largely on Gilbert's (2000, 2005) social mentalities theory and compassionate mind training. Both interventions used imagery to try to change the socio-emotional stance from which participants self-relate (Gilbert 2005; Hackmann and Holmes 2004). Our self-soothing intervention invited participants to engage in compassionate, nurturing, and reassuring imagery and self-talk, and our attack-resisting intervention asked participants to engage in strong, resilient, and retaliating imagery and self-talk. Although our interventions derived most directly from Gilbert's (2005) work, the exercises also incorporated elements from Gestalt therapies, such as two-chair dialogues for self-critical splits (Greenberg et al. 1990; Perls et al. 1951), and from cognitive therapies, such as the challenging of depressogenic thoughts and inner speech (Beck et al. 1979; Meichenbaum 1977). The core tasks of the interventions, however, were to visualize a particular image (i.e., an "inner soother" or "inner challenger"), to focus on and feel its socio-affective qualities, and to incorporate this image in one's self-relating over the two-week study.

We chose to study a sample of chronic acne sufferers and to examine depression, shame, and skin complaints as dependent variables. Depressive symptoms are prevalent in this population (e.g., Wessley and Lewis 1989) and tend to

fluctuate with acne severity (Krowchuk et al. 1991; MacDonald-Hull et al. 1990). Furthermore, acne sufferers are known to experience high levels of shame about their appearance, fearing the evaluations of others and seeing themselves as unattractive (Kellet and Gilbert 2001). It therefore seemed logical that trait self-criticism would be an especially common vulnerability factor underlying the depressive symptoms of acne sufferers and that this population would lend itself well to our research questions.

Hypotheses

For each of our dependent variables, we developed hypotheses about both the main effects of condition and the moderating effects of trait self-criticism.

Depression

Because each intervention was designed to target a unique depressogenic correlate of self-criticism, our first hypothesis was that each treatment would significantly lower depressive symptoms. We expected that the self-soothing intervention would do so by helping participants replace their self-attacking dialogue with a more self-compassionate one, and that the attack-resisting intervention would do so by helping participants become more resilient and retaliatory in the face of their self-attacks. Second, because deficits in self-soothing and resistance to self-attacks are especially marked in self-critics, we anticipated that the effects of the interventions would be most pronounced in self-critical individuals.

Shame

Shame has been described as experiencing one's external and internal worlds as hostile and persecuting (Gilbert 1997; Gilbert et al. 1994; Lewis 2003). Experiences of shame have been found to be especially prevalent among self-critics (Cheung et al. 2004) and acne sufferers (Kellet and Gilbert 2001). We therefore hypothesized, first, that both the self-soothing and attack-resisting interventions would reduce shame in our sample, and second, that they would do so to a greater degree among individuals high in self-criticism.

Skin Complaints

We hypothesized that both interventions would reduce the frequency with which participants felt bothered by their acne emotionally, functionally, and physically. Again, we predicted intervention effects would be greatest for high self-critics (Kellet and Gilbert 2001).

Method

Participants

Advertisements in local online classifieds and newspapers were used to recruit facial acne sufferers currently experiencing acne-related distress. Participants had to meet the following criteria: (1) 18 years or older; (2) currently suffering from facial acne; (3) have taken at least one prescribed acne treatment perceived to be ineffective; (4) not currently receiving psychotherapy; and (5) currently experiencing significant acne-related distress (a mean score of at least 4 on the SKINDEX-16's emotion distress subscale, Chren et al. (1996).[1]

Our final sample consisted of 75 (17 males and 58 females) chronic and current acne sufferers ranging in age from 18 to 38 years (M = 22 years; SD = 3.65). Undergraduate students comprised the majority of the sample (87%). Fifty (75%) participants identified themselves as Caucasian, 11 (14.7%) as Asian, 6 (8%) as Eastern European, 2 (2.7%) as Hispanic, and 1 (1.3%) as African-American; 15 (20%) participants did not identify an ethnic background. Fifty-three (71%) participants indicated that their first language was English, 6 indicated (8%) French, and 16 (21%) indicated another language.

Measures

Participants completed a battery of questionnaires at two laboratory sessions two weeks apart from each other. Cronbach alphas for all Time 1 measures were moderate to high, demonstrating adequate internal consistency; these are reported in Table 1.

Depressive Experiences Questionnaire (DEQ; Blatt et al. 1976)

The Depressive Experiences Questionnaire (DEQ) is a 66-item questionnaire, rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). It assesses the personality dimensions of self-criticism and dependency, which are thought to confer vulnerability to depression (Zuroff and Mongrain 1987). Previous research has found good convergent and discriminant validity for

[1] Although we were interested in the impact of our interventions on depression, we chose not to have inclusion criteria specific to depression. This is because we were interested in the effects of our treatments on the depressive symptoms of distressed acne sufferers across levels of depression. We therefore focused on ensuring all participants shared significant levels of acne-related distress (as assessed by the SKINDEX-16) and expected that many of these people would also show elevated depression scores, even if not clinically severe.

Table 1 Cronbach alphas and correlations for time 1 measures across participants ($N = 73$)

	1	2	3	4	5	6	α
1. Self-criticism (DEQ)	–	.59***	.71***	.11	.28*	.12	.80
2. Depression (BDI)		–	.52***	.10	.35**	.34**	.86
3. Shame (ESS)			–	.12	.18	.29*	.92
4. Emotional distress (SKINDEX-16)				–	.38***	.25*	.80
5. Impaired functioning (SKINDEX-16)					–	.25*	.70
6. Physical symptoms (SKINDEX-16)						–	.70

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

the DEQ (Blaney and Kutcher 1991) (e.g., "If I fail to live up to expectations, I feel unworthy") as well as high test-retest reliability (Zuroff et al. 1983). Only the self-criticism factor was examined in our study.

The Beck Depression Inventory (BDI; Beck et al. 1996)

The BDI is a 21-item measure that assesses the affective, cognitive, motivational, and somatic symptoms of depression. Extensive research supports the BDI's internal consistency as well as its correlation with self-report and interview-based measures of depression (Gotlib and Cane 1989; Shaw et al. 1985). A score that falls in the 20–28 range reflects moderate depression, and one that falls in the 29 to 63 range reflects severe depression (Beck et al. 1979).

Experiences of Shame Scale (ESS; Andrews et al. 2002)

The Experience of Shame Scale (ESS) is a 25-item measure that assesses the frequency of shame experiences related to one's character ("Have you felt ashamed of the sort of person you are?"), behaviour ("Have you tried to cover up or conceal things you felt ashamed of having done?"), and body ("Have you avoided looking at yourself in the mirror?"). Using a scale from 1 (not at all) to 4 (very much), participants rated the frequency of their shame experiences over the past month. Research has shown the ESS to have good discriminant and construct validity, as well as high test-retest reliability (Andrews et al. 2002).

SKINDEX-16 (Chren et al. 1996)

This 16-item measure assesses the frequency with which participants are bothered by their acne physically, emotionally, and functionally. All SKINDEX-16 items begin with the phrase, "During the past week, how often have you been bothered by…" and present a 7-point rating scale, from 0 (never bothered) to 6 (always bothered). Three subscales comprise the measure: physical acne symptoms ("…your skin condition burning or stinging"), acne-related emotional distress ("…embarrassment about your skin condition"), and acne-related impaired functioning ("…the effects of your skin condition on your interaction with others"). The SKINDEX-16 has previously shown high construct validity for all subscales (Chren et al. 2001).

Compliance with Intervention

A short measure of intervention compliance was developed by the research team. This measure was completed by participants in the two intervention conditions after the first and second weeks of the study. The measure's first question asked participants to indicate the frequency (i.e., once per day, twice per day, or three times per day) with which they engaged in the daily exercises. The second question used a 5-point scale to assess the vividness of participants' intervention-specific imagery during the exercises (from "perfectly clear and as vivid as normal vision" to "no image at all, you only *know* that you are thinking of the image"). The third question used a 7-point scale to assess the extent to which participants' experienced intervention-specific emotions during the exercises.

Procedure

Overview of Time 1 Laboratory Session

When participants arrived at their first laboratory session, the experimenter reviewed the purpose and procedure of the study both orally and through a written consent form. Participants were then left alone in a laboratory room where they completed a battery of questionnaires (45–60 min). Once they finished, the experimenter informed them of the condition to which they had been randomly assigned. Those assigned to the control condition were told they had no intervention exercises to complete over the following two weeks and would be given the opportunity to learn about one of the two interventions at their second laboratory session. Those assigned to one of the intervention conditions returned to the laboratory room where they learned about and practiced the self-help exercises to which they had been assigned (approximately 60 minutes). Once

participants completed their first laboratory session, they were remunerated $30, scheduled for their second session, and dismissed.

Intervention Conditions

After completing the questionnaires, participants were seated in front of a desktop computer, to which a 10 by 15 centimeter mirror was attached. The experimenter informed them that a PowerPoint slideshow would take them through the instructions for their two-week self-help intervention. She then familiarized participants with the materials they would need for the slideshow and then exited the room. Both intervention slideshows followed the same format. First, the slides guided participants in a short visualization exercise to familiarize them with the type of imagery the interventions would ask of them.[2] Second, the slides instructed participants to complete an assessment of their acne-related distress. The purpose of this assessment was to orient participants to the cognitive and emotional difficulties our interventions were intended to target.[3] Third, they presented the rationale behind the particular intervention. Fourth, the slides described the particular exercises the participant would be asked to do over the next two weeks. And last, they guided participants in the practice of these exercises in the lab.

Self-soothing Condition

Following the assessment, the slideshow described self-criticism as a form of self-to-self relating, as conceptualized by Gilbert (1992, 2000) and as presented clinically in his compassionate mind training (CMT; Gilbert and Irons 2005). The slideshow then presented Gilbert's (2005, 2007) rationale for why engaging in compassionate self-talk could lower distress related to self-criticism. To facilitate participants' understanding of self-to-self relating and the ways in which the interventions would target this, we personified each component of the intrapersonal relational patterns, as is done in various forms of therapy (e.g., Gestalt two-chair technique):

> There is an inner-critic inside of each us that can say mean and negative things about ourselves in a hostile way. This inner-critic—both what s/he says and how s/he says it—attacks what we might call our "inner-target". Our inner-target typically surrenders to these attacks, increasing our feelings of distress. We call this type of internal dialogue bullying.
> Just as we have an inner-critic that has the ability to attack our "inner-target" in a harsh way (e.g., "You are disgusting!"), we also have an "inner-soother" (a compassionate part within us) that has the ability to soothe our inner-target by saying accepting things in a warm and compassionate way (e.g., "It's OK to feel distressed").
> It is thought that relating to yourself in a more compassionate way activates parts of the brain associated with calmness and well-being, and de-activates parts of the brain associated with anxiety, stress, and depression. We will therefore be providing you with self-soothing exercises to facilitate this.

After this explanation, the central elements of CMT were presented. Participants were instructed to visualize a compassionate image characterized by warmth, acceptance, reassurance, and a desire to soothe distress. This image was also to possess qualities of wisdom, empathy, forgiveness and non-judgment. Participants were asked to spend thirty-seconds visualizing this image, focusing on the compassionate other's tone of voice, body language, size, and emotions. They were asked to describe various aspects of this image on a separate form to ensure they adequately engaged in the imagery. Participants were then instructed to write a letter to themselves from the perspective of this compassionate image, an exercise Gilbert and Irons (2005) suggest as helpful homework for individuals engaged in CMT. Participants were told that their letter should try to reflect the following competencies of compassion enumerated by Gilbert (2005): (1) compassion towards yourself; (2) empathy toward your own distress; (3) sympathy for your own distress; (4) reminders to yourself of how you are like others; (5) acceptance of your appearance and distress; (5) forgiveness for things you criticize yourself for; (6) feelings of warmth for the self; (7) openness to getting help and helping yourself feel better; and (8) awareness of your suffering and openness to grow.

A sample letter designed by the research team was provided as an example (see Appendix A). Participants were then asked to take five to seven minutes to write their own personal letter. Once they finished the letter, participants were instructed to write five statements to themselves from their self-soothing, compassionate image. They were

[2] Participants were asked to visualize an orange and were slowly guided to imagine all of its sensory features—appearance, touch, smell, and taste. We chose an orange as the object of visualization because we felt this was an emotionally neutral object that would not interfere with the subsequent exercises or differentially prepare participants for the particular intervention-specific imagery they would be asked to engage in.

[3] The assessment portion of the slideshow prompted participants to look at themselves in the mirror and to then complete a record form taken from Gilbert and Irons' (2005) chapter on CMT. Similar to standard cognitive therapy assessments, the form asked individuals to report on variants of automatic thoughts—namely, the thoughts and feelings they have about themselves (internal shame) and the thoughts and feelings they believe others have about them (external shame). They were then asked to rate a series of emotions, taken from PANAS-X, to identify how they felt while reflecting on their acne.

reminded of the characteristics of compassion listed above, and were told that their statements should reflect as many of these as possible. Ten sample statements developed by the research team were provided as examples. These included: “I feel upset/angry/sad about my acne and it is okay to feel this way; many people in my position would feel upset,” and “I would be accepting of a friend in my position. I want to be this way to myself too.” We developed these statements based on Gilbert and Iron’s (2005) procedures for facilitating alternative, more compassionate self-talk in self-critical and shame-prone individuals. Participants were told to type their own statements on the computer first and then to copy these by hand onto five separate cue cards to take home.[4]

Participants were then given detailed instructions about the exercises they were to engage in during the following two-week period, and were provided with a printed copy of these to take home. Specifically, they were told to repeat their compassionate self-statements three times per day (morning, midday, and evening), over the next two weeks, while engaging in compassionate imagery. They were told to spend approximately one minute visualizing their warm, accepting image and up to four minutes reading their self-statements repeatedly out loud with emotion and warmth. The duration of these exercises was based on Gilbert and Iron’s (2005) emphasis on frequent practice. At this point, participants were asked to take five minutes to practice this exercise in the lab to become familiar with the task. Once they finished, they were instructed to inform the researcher.

Before being dismissed, participants were provided with a printed copy of the treatment instructions to take with them. They were also reminded to take home their cue cards and to practice their assigned daily exercises over the following two weeks. They were informed that after one week, they would be contacted by e-mail and asked to write themselves a second letter, and then to complete a short measure assessing their compliance and reactions to the treatments thus far.

Attack-resisting Intervention Condition

Once the assessment portion was complete, the slideshow explained self-criticism as a form of hostile self-to-self relating that causes distress. As in the self-soothing condition, the slideshow then went on to present the rationale for how learning to resist one’s self-criticisms could lower distress. We once again personified the various intrapersonal relational patterns to illustrate our explanations; these were articulated as follows:

> There is an “inner-critic” inside of each us that can say mean and negative things about ourselves in a hostile way. This inner-critic—both what s/he says and how s/he says it—attacks what we might call our “inner-target.” We call this type of internal dialogue bullying.
>
> When we feel distressed, it is usually because our inner-target accepts and submits to the attacks of our inner-critic. In other words, we tend to feel most upset and inferior when we relate to our inner-critic’s harsh attacks as a “submitting inner-target.”
>
> For instance, our inner-critic might say with hostility, “Nobody wants to see your face.” Our submitting inner-target, out of habit and/or anxiety, might then accept the put-down without saying anything in defense, surrendering to this harsh attack.
>
> When our submitting inner-target responds to the inner-critic in this victimized way, we experience distress. Although we often unintentionally submit to our inner-critic, we are able to practice and strengthen different, more adaptive ways of reacting to it. Specifically, our inner-target can become a “challenging inner-target.”
>
> Our challenging inner-target can fight back against our inner-critic by presenting him/her with arguments against his/her attacks in a way that is brave, strong, and resilient (e.g., “You are wrong, and don’t have the right to treat me that way!”).
>
> It is thought that fighting back at your inner-critic can help you counter the harshness and irrationality of his/her attacks. More regular challenging of these attacks is thought to de-activate brain activity associated with submissive and avoidant behaviour, shame and depression. We will therefore be providing you with challenging inner-target exercises to facilitate this.

After reading the preceding text, participants were instructed to imagine a confident, resistant, and resilient image—an image that in the face of attacks, mistreatment, or injustice would stand up for them. This image was to possess qualities of strength, logic, perseverance, and self-confidence. They spent thirty-seconds imagining this hypothetical person, focusing on whether they were big or small, the tone of their voice, their body language, and their emotions. Participants then completed a form asking them to describe various characteristics of their image. They were next instructed to write a short letter from the

[4] Given that our interventions were self-help nature, there was no therapist present to individualize our intervention exercises to each participant. To overcome this limitation, we tried as much as possible in our instructions to encourage individual adaptations of the exercises, staying within the assigned format, to facilitate their targeting the personal experiences of the participant. For instance, our assessment form asked individuals to report on their own thoughts and feelings, and our intervention asked them to write their own self-letter and self-statements.

perspective of the challenging and resilient image to their personified "inner-critic." They were told that their letter should reflect as many of the following characteristics, developed by the research team, as possible: (1) the view that you are strong and "unbeatable"; (2) the belief that your inner-critic is unnecessarily or excessively harsh and abusive; (3) confidence in who you are and what you look like, even in the face of attacks from your inner-critic; (4) the courage to fight back when your inner-critic tries to make you feel small and weak; (5) logic and rationality that counter the mean and unproven statements your inner-critic makes; (6) resilience and conviction when dealing with criticisms from your inner-critic and others; and (7) intolerance of mean and unjust treatment. As in the self-soothing intervention, a sample letter was provided (see Appendix B).

Participants were subsequently asked to write five self-statements from their resisting image retaliating against their personified self-critic. Ten sample statements were provided and included "I have the inner strength to fight my distress and your role in creating it" and "It's not true that people will reject me just because I have acne." As in the self-soothing condition, participants wrote their own personally-significant statements and were instructed to repeat these out loud three times a day for the next two weeks, eliciting emotion and imagery of strength and resilience. The rest of the procedure mirrored that of the self-soothing condition.

Overview of Time 2 Laboratory Session

During the second laboratory session, participants in the two intervention conditions were asked to write a third letter, the final component of their treatment. They then completed a final measure assessing their compliance. Participants in all three conditions were asked to complete the same battery of questionnaires they completed at Time 1. Once they finished all components of the procedure, the remaining $70 of the compensation was dispensed. Participants in the control condition were offered the opportunity to receive instructions for one of the interventions. At the conclusion of the second laboratory session, each subject received psychoeducational materials about the causes and the psychological and emotional impact of acne.

Results

Descriptive Statistics

Table 1 presents Cronbach alphas and correlation coefficients for all moderator and dependent variables at Time 1. As expected, self-criticism, depression, and shame were moderately to highly correlated with one another. The three subscales of the SKINDEX—emotional distress, impaired functioning, and physical symptoms—were significantly but modestly correlated with one another. These correlations, and the subscales' differential associations with the other study variables, suggested that the three SKINDEX factors capture different constructs. We therefore chose to examine each as a separate dependent variable in our analyses.

Table 2 presents means and standard deviations for our intervention compliance measure, along with t-tests of the difference between the two intervention conditions. There were no differences between the intervention conditions in any of the three components of compliance, daily compliance ($p > .35$), imagery vividness ($p > .50$), and emotional strength of self-talk ($p > .50$). These findings revealed that participants in the two intervention conditions were equally compliant with the exercises they were assigned and therefore differences in compliance could not be a confound in our central analyses.

Table 3 presents means and standard deviations for each dependent variable, at Times 1 and 2, by condition. One-way ANOVAs revealed no between-condition differences at Time 1 for any of the study variables. At Time 1, BDI scores in our sample ranged from 21 to 52 with a mean of 31.1 and a standard deviation of 6.72 (see Table 3). These scores therefore reflect a sample that was moderately to severely depressed at the study's start.

Analytic Strategy

To test our first set of hypotheses, repeated measures ANOVAs were conducted for each of the three dependent

Table 2 Means and standard deviations of compliance by condition

Condition	Mean	SD	t
Daily compliance			
Self-soothing	2.44	.41	.91
Attack-resisting	2.30	.45	
Imagery vividness			
Self-soothing	2.88	.94	.63
Attack-resisting	2.70	.85	
Emotional strength of self-talk			
Self-soothing	4.83	1.31	−.60
Attack-resisting	5.11	1.02	

Note: The last column reports t values based on the contrast between the intervention conditions; none of these was significant. Means and standard deviations were computed based on average scores of the measure across the two measurement time-points (after weeks 1 and 2). N's were 23 and 24 in the self-soothing and attack-resisting conditions respectively

Table 3 Means and standard deviations of dependent variables by condition at times 1 and 2

Condition	Mean		SD	
	Time 1	Time 2	Time 1	Time 2
Depression (BDI)				
Self-soothing	29.62	27.17	4.47	5.38
Attack-resisting	31.51	26.20	7.80	4.00
Control	31.92	30.32	7.15	7.96
Shame (ESS)				
Self-soothing	61.38	52.83	11.59	13.64
Attack-resisting	64.45	54.77	15.33	16.12
Control	61.87	60.55	15.89	18.09
Emotional distress (SKINDEX-16)				
Self-soothing	4.74	3.08	0.71	1.52
Attack-resisting	4.63	2.73	0.57	1.58
Control	4.80	4.48	0.66	0.83
Impaired functioning (SKINDEX-16)				
Self-soothing	2.98	1.46	1.25	1.46
Attack-resisting	2.97	1.41	1.16	1.22
Control	3.23	2.89	1.27	1.25
Physical symptoms (SKINDEX-16)				
Self-soothing	2.78	1.98	1.17	1.35
Attack-resisting	2.67	2.16	1.38	1.39
Control	2.76	2.98	1.02	1.39

Note: These values reflect *n*'s of 23, 26, and 24 for the self-soothing, attack-resisting, and control conditions respectively

variables—depression, shame, and skin complaints. The primary analyses included one between-subjects factor with three levels, intervention condition (self-soothing, attack-resisting, control), and one within-subjects factor with two levels, Time (Time 1, Time 2). All Time 1 variables were standardized to facilitate interpretation of results. Gender was initially included as a predictor but produced no main or interactive effects and was thus excluded.

For each analysis that yielded a significant Condition by Time effect, three comparisons were tested using 1-df contrasts: (1) the self-soothing versus the control condition; (2) the attack-resisting versus the control condition; and (3) the self-soothing versus the attack-resisting condition. The first two were considered to be planned comparison hypotheses; the third was considered to be post-hoc to determine whether between-intervention differences, though unpredicted, had emerged.

To determine whether trait self-criticism moderated the impact of condition on the dependent variables at Time 2, multiple regression analysis was used rather than ANOVA. Time 2 depression, shame, and skin complaints respectively served as the dependent variables, while the Time 1 levels of these respective measures served as covariates. In each analysis, condition was specified as a categorical variable with three levels. Condition, self-criticism, and the interaction between condition and self-criticism were entered as predictors. All significant interactions were probed using simple slope analyses (Aiken and West 1991).

Depression

Condition had no effect on depression, $F\ (2, 69) = 1.51$, $p = .23$, but Time did, $F\ (1, 69) = 25.82$, $p < .001$, revealing that the two-week time period led to reduced depression across conditions. Of greater interest, Condition and Time interacted to predict depression, $F\ (2, 69) = 3.47$, $p = .04$, indicating that condition moderated depression change over the two-week study period. Planned comparisons showed one significant contrast in partial support of our hypothesis; the attack-resisting condition lowered depressive symptoms more than the control condition, $F\ (1, 69) = 6.00$, $p = .02$. The self-soothing condition, however, did not lower depression more than the control condition, $F\ (1, 69) = 0.38$, $p = .62$, and tended to be less effective than the attack-resisting condition, $F\ (1, 69) = 3.36$, $p = .07$.

Multiple regression analysis revealed that self-criticism interacted with condition to predict Time 2 depression, $F\ (2, 65) = 3.86$, $p = .03$. To determine the nature of this interaction, simple slopes analyses were conducted to test the significance of the effect of self-criticism within each of the three conditions. These results partially supported our hypotheses, revealing that self-criticism predicted Time 2 depression in the attack-resisting intervention only ($B = -2.82$, $t = -2.45$, $p = .02$). Estimated levels of Time 2 depression were calculated and plotted for high (+1) and low (−1) levels of self-criticism in all three conditions (see Fig. 1). The graph revealed that individuals in the attack-resisting condition who were high in trait self-criticism had lower depression scores at Time 2 compared to those who were low in self-criticism.

Shame

Condition had no effect on shame, $F\ (2, 71) = .49$, $p = 61$, but once again, Time did, $F\ (1, 71) = 25.13$, $p < .001$. Crucial to our hypothesis, Condition and Time interacted to predict the difference in shame between the two time points, $F\ (2, 71) = 4.08$, $p = .02$. This finding indicates that changes in shame over the two weeks were moderated by the condition to which participants had been assigned. Planned comparisons revealed two significant contrasts that supported our hypotheses. Individuals in both the attack-resisting and the self-soothing conditions showed greater reductions in shame experiences than controls, $F\ (1, 71) = 6.92$, $p = .01$ and $F\ (1, 71) = 5.13$, $p = .03$. The

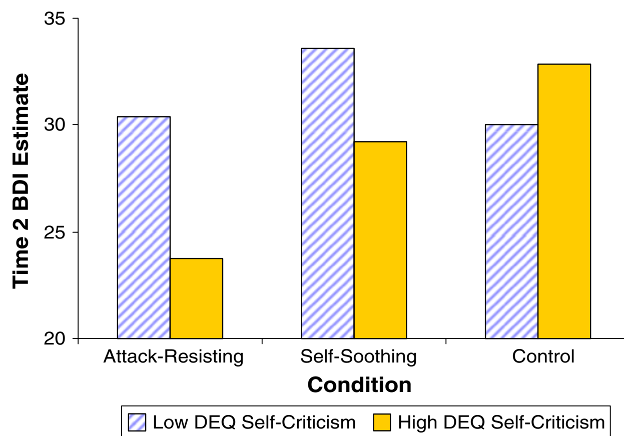

Fig. 1 Interaction of DEQ self-criticism and condition in predicting Time 2 depression while controlling Time 1 depression. Estimated standardized values were calculated for all combinations of self-criticism and condition, where −1 *SD* was low self-criticism and +1 *SD* was high self-criticism. The graph illustrates that the more self-critical individuals were in the attack-resisting condition, the lower their depression at Time 2

interventions did not differ significantly in their effects. Regression analyses revealed that self-criticism did not interact with condition to predict Time 2 shame, F (2, 66) = .40, p = .67. In sum, both interventions reduced shame and did so equally across levels of participant self-criticism.

Skin Complaints

Emotional Distress

Both Condition and Time exerted main effects on changes in acne-related emotional distress, F (2, 70) = 9.10, p < .001 and F (1, 70) = 65.19, p < .001. Most importantly, Condition and Time interacted to predict change in acne-related distress over the two weeks, F (2, 70) = 9.65, p < .001. Planned comparisons revealed two significant contrasts. As predicted, individuals in both the attack-resisting and self-soothing conditions showed greater reductions in acne-related distress compared to those in the control condition, F (1, 70) = 17.47, p < .001 and F (1, 70) = 10.40, p < .01. Distress reductions did not differ significantly between the attack-resisting and self-soothing conditions. In addition, regression analyses revealed that self-criticism did not interact with condition to predict Time 2 emotional distress, F (2, 71) = .18, p = .84.

Impaired Functioning

Both Condition and Time exerted main effects on acne-related functional impairments, F (2, 70) = 5.61, p = .006 and F (1, 70) = 48.89, p < .001. Condition and Time interacted to predict changes in acne-related impaired functioning between Times 1 and 2, F (2, 70) = 5.58, p < .01. There were again two significant contrasts that supported our hypothesis. Individuals in both the attack-resisting and the self-soothing conditions showed greater reductions in functional impairments than those in the control condition, F (1, 70) = 8.70, p < .01 and F (1, 70) = 7.89, p < .01. Reductions did not differ significantly between the two intervention conditions. In addition, self-criticism did not interact with condition to predict Time 2 functional impairments, F (2, 71) = .05, p = .95.

Physical Symptoms

Condition had no effect on the extent to which participants were physically bothered by acne symptoms, F (2, 70) = 1.59, p = .21 but Time did F (1, 70) = 4.33, p = .04. A significant interaction between Condition and Time was once again found, F (2, 70) = 3.38, p = .04, indicating that condition affected the magnitude of the difference in acne symptoms between the two time points. Planned comparisons showed one significant contrast and a trend. Those in the self-soothing condition reported greater reductions in perceived symptoms compared to those in the control condition, F (2, 70) = 6.25, p = .01. Those in the attack-resisting condition tended to show greater reductions in perceived symptomatology compared to controls, F (2, 70) = 3.38, p = .07. The self-soothing and attack-resisting conditions did not differ in their effects. In addition, regression analyses found no interaction between self-criticism and condition predicting Time 2 acne, F (2, 71) = .02, p = .98.

Discussion

The current study investigated the impact of two self-help interventions on the depression, shame, and skin complaints of acne sufferers. Each intervention used imagery-based self-talk exercises designed to mitigate one of two intrapersonal deficits associated with self-criticism and depression: difficulties self-soothing and difficulties resisting self-attacks. The self-soothing intervention, developed to cultivate a compassionate, warm, and reassuring style of self-relating, lowered shame and skin complaints, but not depression. The attack-resisting intervention, developed to elicit a strong, confident, and retaliatory style of a self-relating, lowered depression, shame, and skin complaints. It also lowered depression significantly more for high than for low self-critics. Overall, our hypotheses were partially supported for the self-soothing intervention and mostly supported for the attack-resisting intervention.

Depression

As predicted, the attack-resisting intervention reduced depression, and did so particularly for self-critical individuals. Average Time 2 BDI scores in this condition, however, were still elevated relative to what one would find in a non-psychiatric community sample. Nevertheless, participants in the attack-resisting condition showed a meaningful change in symptom severity—mean depression levels dropped from the severe range on the BDI (i.e., 29 and above) to the moderate range (i.e., from 21 to 28).

The central instructions of the attack-resisting intervention were to visualize a resilient and resistant image and to cultivate this in one's daily self-relating. Depression is more prevalent among individuals who accept and feel defeated by self-attacks, and this tendency to submit to self-attacks is more pronounced among self-critics (Sturman and Mongrain 2005; Whelton and Greenberg 2005). Although we can only speculate about the mechanism(s) by which the attack-resisting intervention reduced depression, it may have done so by replacing participants' tendency to submit to self-attacks with a tendency to stand up to them. Indeed, the fact that self-critical individuals showed the greatest reductions in depression lends support to the hypothesis that practicing a more resistant, retaliatory style of self-talk can improve one's depression. Findings also lend support to the theory that deficits in resisting self-attacks are an important component of what makes self-critics vulnerable to depression (Greenberg and Whelton 2005; Greenberg et al. 1990).

The finding that the self-soothing intervention did not lower depression surprised us. Deficits in self-compassion and self-reassurance have been found to underlie trait self-criticism and to contribute uniquely to depressive symptoms (Irons et al. 2006; Neff 2003). We therefore expected that because the self-soothing intervention instructed participants to visualize a warm, compassionate image from which to self-relate, the intervention would improve these deficits and thereby reduce depression, especially for self-critics. Neither of these findings emerged, however. One explanation is that the intervention improved participants' capacity and tendency to self-soothe, as intended, but that these improvements did not result in lowered depression. A second explanation is that the intervention failed to improve self-soothing and for this reason had no impact on depressive symptoms. Future studies might include more process measures to better ascertain the theoretical and pragmatic implications of our findings.

Shame

As anticipated, both the attack-resisting and self-soothing interventions reduced shame experiences over the two-week study period. These changes in shame were not only statistically significant but also clinically significant. Mean levels of shame among participants in the intervention conditions dropped to a level characteristic of a general population of undergraduate students (i.e., $M = 55.58$, $SD = 13.95$; Andrews et al. 2002).

Although we do not have data to speak to the mechanisms by which these interventions lowered shame, we speculate that relative to the control condition, the attack-resisting and self-soothing interventions lessened the extent to which acne sufferers felt threatened and tormented by their self-attacks. Given the intertwined nature of self-criticism and shame experiences (Gilbert 2005, 2007), it makes sense that interventions designed to target one might lower the other. It could also be that by changing participants' patterns of self-to-self relating, the interventions changed their beliefs about themselves in relation to others. Participants in the attack-resisting intervention might have become more confident in their ability to stand up to others' criticisms, while those in the self-soothing intervention might have come to believe that others see them with more compassion than criticism. To shed more light on the mechanisms by which shame was reduced, future research would benefit from investigating the extent to which increasing the capacity and frequency with which individuals resist self-attacks and/or self-soothe attenuates shame experiences.

Skin Complaints

As predicted, both the self-soothing and attack-resisting conditions significantly lowered the frequency with which participants were bothered emotionally, functionally, and physically by their acne. In fact, the drops in SKINDEX-16 scores we observed over our two-week study was comparable to those of clinically "improved" dermatological patients over a one year period (Chren et al. 2001), suggesting that our interventions produced clinically meaningful changes. Given that the SKINDEX is not an objective report of acne severity, we cannot claim that our interventions improved acne. Nevertheless, the fact that it is the individual's perception of his or her acne severity that fuels treatment-seeking behaviours highlights the significance of this finding. Indeed, it would seem unlikely that an individual who is not bothered by his or her acne would invest in dermatological care. Therefore, the findings that two short weeks of daily psychological exercises lessened the frequency of acne-related complaints might have important pragmatic implications for both individual acne sufferers and the health care system.

Limitations

First, the two-week duration of our study was short. It would be worthwhile to investigate the impact of the

intervention exercises over a longer period of time. It could be, for instance, that building the capacity to resist one's self-attacks is more effective at lowering depression in the short-term, but that improving self-soothing is integral to prolonged recovery. Indeed, recent research suggests that self-compassion, more than self-esteem, promotes well-being and buffers against psychological distress (e.g., Leary et al. 2007; Neff et al. 2007a).

Second, our sample of acne sufferers was selected based on their level of acne-related distress and not on their depressive symptoms. Although one might argue this limits the extent to which we can generalize our findings to clinically depressed outpatients, the average level of depression in our sample was in the clinically severe range. Nevertheless, our research questions should be tested in a psychiatric sample in which self-criticism might be more pathological (Gilbert and Irons 2004).

Third, we did not develop an intervention that combined self-soothing and attack-resisting approaches and were therefore unable to test the effects of a combined treatment. It could be that optimal recovery from depression lies in a combination of enhanced self-compassion and improved self-attack resistance.

Fourth, the self-help medium of our interventions may have mitigated their impact. Because there was no therapist present, it was impossible for us to determine the extent to which participants engaged in the exercises in the ways we hoped. In addition, participants might have experienced the interventions differently in the context of traditional, therapist-guided psychotherapy. For self-critical individuals in particular, for instance, the presence of a warm, compassionate therapist might have been integral to the process of developing and benefiting from self-soothing (Gilbert 2005, 2007). Future research should examine similar interventions in psychotherapy.

Last, because we did not include measures of the processes variables that might have mediated intervention effects, we are unable to make conclusions about the mechanisms by which our self-help exercises succeeded and failed. Future studies would benefit from including measures of our hypothesized mediators (i.e., self-soothing and attack-resisting capacities) and of variables posited to be mediators in cognitive theories of depression (e.g., the degree of logic and evidence underlying participants' self-statements). This kind of research would help us to understand the extent to which psychosocial functioning is influenced by socio-emotional experience of one's self-talk (and imagery) versus its underlying rationality and realism.

Conclusions and Implications

The current study highlights the value of better understanding and treating the destructive intrapersonal processes that characterize trait self-criticism. Our results indicate that among acne sufferers, practicing a warmer, more self-soothing style of self-talk can reduce shame and skin complaints, and practicing a stronger, more resistant style of self-talk can reduce depression, shame, and skin complaints. Findings highlight the role that patterns of intrapersonal relating play in the maintenance and improvement of psychosocial distress among populations characterized by shame and self-criticism (Gilbert 2005, 2007). The study offers useful tools to cognitive-behavioural therapists who might struggle to help self-critical patients internalize positive beliefs about themselves. In addition to exposing patients to the logical errors underlying their self-criticisms, cognitive therapists might make use of imagery to facilitate shifts in the underlying social roles, and thus affective qualities, of patients' self-relating. At a broader level, our study suggests that computer-administered self-help exercises can yield rapid and significant benefits to individuals in distress. Our findings are particularly relevant for individuals who might be unable or ashamed to discuss their medical or psychiatric problems with a health care provider.

Appendix A

Sample Letter Provided in Self-soothing Condition

I recognize that you are very upset right now about your acne, and it is okay to feel that way. I understand why you feel distressed and I would feel the same way if I were in your position. Please do not blame yourself for having acne because it is not your fault and it does not mean that you are flawed. I know you think that everyone stares at your acne when you go grocery shopping but this may not be the case. Remember that good, worthwhile people will not focus on your acne but rather focus on who you really are and your positive qualities. People who matter will feel comfortable around you no matter how you look. I care about you and will always be kind and compassionate to you regardless of the condition of your skin. Please try to accept how you look and remind yourself that you deserve to be loved as much as everyone else. It is OK, though, to feel upset and hopeless at times; all people do at certain times of their life. It is OK to *not* be perfect, physically or emotionally. What would you say to a friend in your position? You would probably empathize with their suffering, and let them know that you care about them and love them and want to be around them regardless of how they look.

Appendix B

Sample Letter Provided in Attack-resisting Condition

I've been letting you attack me for some time now, and I'm not going to let you continue to put me down in the way that you do. You make me feel horrible and say things that are probably not even true. I'm going to stop believing what you say, because I can be logical and see the falsehoods in what you say to me. Just because I have acne, it doesn't mean I should be told to hide my face or that people won't like me. I have no reason to believe these things so stop telling me them over and over. I am confident that behind my skin, I'm a valuable person who has a lot of worth. I will not let you beat me down and make me miserable. From now on, I'm going to stand up for myself when you say negative things to me. I'm smart enough to see that you have no evidence for most of what you say to me and I'm not going to believe it. I also don't deserve to be treated in the harsh way you treat me, and am strong enough to stop you. You are making me feel bad, and I won't let you do this to me anymore.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury, Park, CA: Sage.

Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: The experience of shame scale. *The British Journal of Clinical Psychology, 41*, 29–42. doi:10.1348/014466502163778.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Beck, A. T., Steer, R. A., & Brown, B. K. (1996). *Beck depression inventory manual* (Vol. 2). San Antonio: Psychological Corporation.

Blaney, P., & Kutcher, G. (1991). Measures of depressive dimensions: Are they interchangeable? *Journal of Personality Assessment, 56*, 502–512. doi:10.1207/s15327752jpa5603_11.

Blatt, S. J. (1974). Levels of object representation in anaclitic and introjective depression. *The Psychoanalytic Study of the Child, 29*, 107–157.

Blatt, S. J. (2004). *Experiences of depression: Theoretical, research and clinical perspectives*. Washington, DC: American Psychological Association Press.

Blatt, S. J., d'Afflitti, J. P., & Quinlan, D. M. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology, 85*, 383–389. doi:10.1037/0021-843X.85.4.383.

Blatt, S. J., & Zuroff, D. C. (1992). Interpersonal relatedness and self-definition: Two prototypes for depression. *Clinical Psychology Review, 12*, 527–562. doi:10.1016/0272-7358(92)90070-O.

Bowlby, J. (1980). *Loss: Sadness and depression. Attachment and loss* (3rd ed.). London: Hogarth Press.

Cheung, M. S. P., Gilbert, P., & Irons, C. (2004). An exploration of shame, social rank and rumination in relation to depression. *Personality and Individual Differences, 36*(55), 1143–1153. doi:10.1016/S0191-8869(03)00206-X.

Chren, M., Lasek, R. J., Quinn, L. M., Mostow, E. N., & Zyzanski, S. J. (1996). Skindex, a quality-of-life measure for patients with skin disease: Reliability, validity, and responsiveness. *The Journal of Investigative Dermatology, 107*, 707–713. doi:10.1111/1523-1747.ep12365600.

Chren, M., Lasek, R. J., Sahay, A. P., & Sands, L. P. (2001). Measurement properties of Skindex-16: A brief quality-of-life measure for patients with skin diseases. *Journal of Cutaneous Medicine and Surgery, 5*(2), 105–110. doi:10.1007/BF02737863.

Freud, S. (1923). *Das Ich und das Es*, Internationaler Psychoanalytischer Verlag, Leipzig, V. Z. English translation, *The Ego and the Id*, Riviere, J. (trans.), Hogarth Press and Institute of Psycho-analysis, London, UK, 1927. Revised for *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Strachey, J. (Ed.), W. W. Norton and Company, New York, NY, 1961.

Gilbert, P. (1992). *Depression: The evolution of powerlessness*. New York: Guilford Press.

Gilbert, P. (1997). The evolution of social attractiveness and its role in shame, humiliation, guilt and therapy. *British Journal of Medical Psychology, 70*, 113–147.

Gilbert, P. (2000). Social mentalities: Internal 'social' conflicts and the role of inner warmth and compassion in cognitive therapy. In P. Gilbert & K. G. Bailey (Eds.), *Genes on the couch: Explorations in evolutionary psychotherapy* (pp. 118–150). Hove: Brenner-Routledge.

Gilbert, P. (Ed.). (2005). *Compassion: Conceptualisations, research, and use in psychotherapy*. London: Routledge.

Gilbert, P. (2007). *Psychotherapy and counselling for depression* (3rd ed.). London: SAGE Publications.

Gilbert, P., Baldwin, M., Irons, C., Baccus, J. R., & Palmer, M. (2006). Self-Criticism and self-warmth: An imagery study exploring their relation to depression. *Journal of Cognitive Psychotherapy: An International Quarterly, 20*(2), 183–200. doi:10.1891/jcop. 20.2.183.

Gilbert, P., Birchwood, M., Gilbert, J., Trower, P., Hay, J., Murray, B., et al. (2001). An exploration of evolved mental mechanisms for dominant and subordinate behaviour in relation to auditory hallucinations in schizophrenia and critical thoughts in depression. *Psychological Medicine, 31*, 1117–1127. doi:10.1017/S0033291701004093.

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

Gilbert, P., & Irons, C. (2004). A pilot exploration of the use of compassionate images in a group of self-critical people. *Memory (Hove, England), 12*, 507–516. doi:10.1080/09658210444000115.

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

Gilbert, P., Pehl, J., & Allan, S. (1994). The phenomenology of shame and guilt: An empirical investigation. *The British Journal of Medical Psychology, 67*, 23–36.

Gilbert, P., & Proctor, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy, 13*, 353–379. doi:10.1002/cpp. 507.

Gotlib, I. H., & Cane, D. B. (1989). Self-report assessment of depression and anxiety. In P. C. Kendall & D. Watson (Eds.), *Anxiety and depression: Distinctive and overlapping features* (pp. 131–169). San Diego: Academic.

Greenberg, L. S., Elliott, R. K., & Foerster, F. S. (1990). Experiential processes in the psychotherapeutic treatment of depression. In C. D. McCann & N. S. Endler (Eds.), *Depression: New directions in theory, research and practice* (pp. 157–185). Toronto: Wall & Emerson.

Hackmann, A., & Holmes, E. A. (2004). Reflecting on imagery: A clinical perspective and overview of the special issue of *Memory* on mental imagery and memory in psychopathology. *Memory (Hove, England), 12*, 389–402.

Hammen, C., & Garber, J. (2001). Vulnerability to depression across the lifespan. In R. Ingram & J. Price (Eds.), *Handbook of vulnerability to psychopathology: Risk across the lifespan* (pp. 258–267). New York: Guilford Press.

Irons, C., Gilbert, P., Baldwin, M. W., Baccus, J., & Palmer, M. (2006). Parental recall, attachment relating and self-attacking/self-reassurance: Their relationship with depression. *The British Journal of Clinical Psychology, 12*, 297–308. doi:10.1348/014466505X68230.

Kellet, S., & Gilbert, P. (2001). Acne: A biopsychosocial and evolutionary perspective with a focus on shame. *British Journal of Health Psychology, 6*, 1–24. doi:10.1348/135910701169025.

Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry, 62*, 617–627. doi:10.1001/archpsyc.62.6.617.

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

Krowchuk, D. P., Stancin, T., Keskinen, R., Walker, R., Bass, J., & Anglin, T. M. (1991). The psychological effect of acne on adolescents. *Pediatric Dermatology, 8*, 332–338. doi:10.1111/j.1525-1470.1991.tb00945.x.

Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92*(5), 887–904. doi:10.1037/0022-3514.92.5.887.

Lewis, M. (2003). The role of the self in shame. *Social Research, 70*(4), 1181–1204.

Linehan, M. (1993). *Cognitive behavioural treatment of borderline personality disorder*. New York: Guilford Press.

Lutz, A., Brefczynski-Lewis, J., Johnstone, T., & Davidson, R. J. (2008). Regulation of the neural circuitry of emotion by compassion meditation: Effects of meditative expertise. *PLoS ONE, 3*(3), e1897.

MacDonald-Hull, S., Cunliffe, W. J., & Hughes, B. R. (1990). Treatment of the depressed and dysmorphic acne patient. *Clinical & Experimental Dermatology, 16*, 210–211. doi:10.1111/j.1365-2230.1991.tb00350.x.

Meichenbaum, D. (1977). *Cognitive behavioral modification: An integrative approach*. New York: Plenum Press.

Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223–250. doi:10.1080/15298860309027.

Neff, K. D. (2004). Self-compassion and psychological well-being. *Constructivism in the Human Sciences, 9*, 27–37.

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007a). Self-compassion and adaptive psychological functioning. *Journal of Personality, 41*, 139–154. doi:10.1016/j.jrp. 2006.03.004.

Neff, K. D., Rude, S. S., & Kirkpatrick, K. (2007b). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality, 41*, 908–916. doi:10.1016/j.jrp. 2006.08.002.

Padesky, C. A. (1994). Schema change processes in cognitive therapy. *Clinical Psychology & Psychotherapy, 1*(5), 267–278.

Perls, F., Hefferline, R., & Goodman, P. (1951). *Gestalt therapy: Excitement and growth in the human personality*. New York, NY: Julian.

Rector, N. A., Bagby, R. M., Segal, Z. V., Joffe, R. T., & Levitt, A. (2000). Self-criticism and dependency in depressed patients treated with cognitive therapy or pharmacotherapy. *Cognitive Therapy and Research, 24*, 571–584. doi:10.1023/A:1005566112869.

Shaw, B. F., Vallis, T. M., & McCabe, S. B. (1985). The assessment of the severity and symptom patterns in depression. In E. E. Beckham & W. R. Leber (Eds.), *Handbook of depression: Treatment, assessment, and research* (pp. 372–407). Homewood, IL: Dorsey Press.

Sturman, E. D., & Mongrain, M. (2005). Self-criticism and major depression: An evolutionary perspective. *The British Journal of Clinical Psychology, 44*, 505–519. doi:10.1348/014466505X35722.

Tarrier, N. (2006). *Case formulations in cognitive behaviour therapy: The treatment of challenging and complex cases*. London: Routledge.

Teasdale, J. D., & Cox, S. G. (2001). Dysphoria: Self-devaluative and affective components in recovered depressed patients and never depressed controls. *Psychological Medicine, 31*, 1311–1316. doi:10.1017/S003329170100424X.

Wessley, S. C., & Lewis, G. H. (1989). The classification of psychiatric morbidity in attendees at a dermatological clinic. *The British Journal of Psychiatry, 155*, 686–691.

Whelton, W. J. (2000). Emotion in self-criticism. Unpublished Ph.D. Thesis: York University, Toronto: Canada.

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.

Zuroff, D. C., Colussy, S. A., & Wielgus, M. S. (1983). Selective memory and depression: A cautionary note concerning response bias. *Cognitive Therapy and Research, 7*, 223–232.

Zuroff, D. C., Mongrain, M., & Santor, D. C. (2004). Conceptualizing and measuring personality vulnerability to depression: Comment on Coyne and Whiffen (1995). *Psychological Bulletin, 130*, 489–511. doi:10.1037/0033-2909.130.3.489.