Treatment for Chronic Depression Using Schema Therapy

Fritz Renner and Arnoud Arntz, Department of Clinical Psychological Science, Maastricht University

Ina Leeuw, Academic Community Mental Health Centre (RIAGG) Maastricht

Marcus Huibers, Department of Clinical Psychology, VU University Amsterdam, Department of Clinical Psychological Science, Maastricht University

Schema therapy (ST) is an integrative treatment approach to chronic lifelong problems with an established effectiveness for treating personality disorders. This article describes the adaptation of ST to chronic depression by reviewing the literature on the underlying risk factors to chronic depression. A model of chronic depression is presented, describing the interplay between empirically supported risk factors to chronic depression (early adversity, cognitive factors, personality pathology, interpersonal factors). We provide a treatment protocol of ST for chronic depression describing techniques that can be used in ST to target these underlying risk factors. Based on the current body of empirical evidence for the underlying risk factors to chronic depression, ST appears to be a promising new treatment approach to chronic depression, as it directly targets these underlying risk factors.

  Key words: chronic depression, early maladaptive schemas, risk factors, schema therapy. [Clin Psychol Sci Prac 20: 166–180, 2013]

Schema therapy (ST) is an integrative treatment approach combining cognitive, behavioral, experiential, and psychodynamic elements and techniques (Young, Klosko, & Weishaar, 2003). Influenced by the cognitive theory of depression, Young elaborated on the

schema concept and developed ST as a novel treatment for clients with chronic psychological disorders. Empirical research on the effectiveness of ST is in its initial stage. While there is evidence for the effectiveness of ST in treating clients with borderline personality disorder (Farrell, Shaw, & Webber, 2009; Giesen-Bloo et al., 2006; Nadort et al., 2009; Nordahl, Holthe, & Haugum, 2005) and clients with Cluster-C, paranoid, histrionic, and narcissistic personality disorders (Bamelis, Evers, Spinhoven, & Arntz, 2012), there is a lack of research on ST for chronic Axis I disorders. In addition to the effects of ST on personality pathology, a recent large randomized controlled trial found that ST also has positive effects on comorbid depression in clients with primarily Cluster-C personality disorders (Bamelis et al., 2012). Such findings raise the question whether ST is also a valuable treatment for clients with primary depressive symptoms.

Chronic depression is a relatively common (affecting 19% of depressed clients; Keller & Hanks, 1995) and difficult to treat (Kocsis, 2003; Riso & Newman, 2003) mental disorder. Four types of chronic depression are distinguished in the literature: chronic major depressive disorder, dysthymic disorder, double depression, and recurrent major depressive disorder (MDD) without full interepisode recovery (Klein, 2010). Whereas these subtypes appear to be rather homogenous with respect to etiology and clinical features, they can be clinically distinguished from episodic forms of depression (McCullough et al., 2003). Compared with episodic forms of depression, chronic depression has a stronger

Address correspondence to Fritz Renner, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands. E-mail: Fritz.Renner@Maastrichtuniversity.nl.

negative impact on the quality of life (Wells, Burnam, Rogers, & Hays, 1992), results in more suicide attempts and hospitalizations (Arnow & Constantino, 2003; Torpey & Klein, 2008), is associated with greater service use (Howland, 1993), and incurs higher economic costs (Smit et al., 2006), stressing the importance of effective treatment protocols for chronic forms of depression.

TREATMENT OF CHRONIC DEPRESSION

Common treatment approaches to chronic depression include antidepressant medication (ADM; Kocsis, 2003), cognitive therapy (CT; Riso & Newman, 2003), cognitive behavioral analysis system of psychotherapy (CBASP; McCullough, 2003), and combined psychotherapy and medication treatments (Thase, 1999). Although psychotherapy and ADM treatments have an established effectiveness in the treatment of chronic depression, the effect sizes of psychotherapy in reducing depressive symptoms are small (Cuijpers et al., 2010) and remission rates of ADM treatment for chronic depression usually fall well below 50% (Kocsis, 2003), reflecting the need for more effective treatment approaches for chronic depression. Higher response and remission rates are obtained in ADM and psychotherapy combination treatments (Browne et al., 2002; Keller et al., 2000; Manber et al., 2008; Pampallona, Bollini, Tibaldi, Kupelnick, & Munizza, 2004; Thase et al., 1997). For example, in a large randomized clinical trial (RCT), 681 outpatients with chronic depression were randomized to either ADM treatment (nefazodone), CBASP, or a combination treatment (Keller et al., 2000). In line with earlier studies of psychotherapy or ADM treatment for chronic depression, about half (48%) of the clients in the ADM- and CBASP-alone groups responded to treatment. In the combination group, more than two-thirds of the clients (73%) responded to treatment (Keller et al., 2000), which is in line with the notion that combined treatment for chronic depression results in more positive outcomes (Pampallona et al., 2004).

Although these results seem promising, the initial effects of treatments for chronic depression are often not maintained, and continuation-phase treatment (4–9 months) and/or maintenance-phase treatments (one year or more) are necessary to reduce relapse and recurrences. For example, Gelenberg et al. (2003) randomized outpatients with chronic depression, who achieved and maintained a clinical response during acute-phase and continuation-phase treatment for chronic depression, to either 52 weeks of nefazodone (selective serotonin reuptake inhibitor; SSRI) or pill placebo. The authors found that the risk of recurrence at the end of the one-year maintenance phase was statistically significantly lower in the nefazodone group (30.3%) compared with the placebo group (47.5%). Yet, clients who were initially treated to remission (in the acute phase of the same study) with CBASP did not show lower relapse rates compared with clients who were treated to remission with nefazodone. These findings suggest that CBASP does not add any prophylactic effects above ADM in the treatment of chronic depression (Gelenberg et al., 2003). Moreover, augmentation with CBASP to continued ADM treatment in chronically depressed nonresponders has been shown to have no beneficial effects above continued ADM treatment alone (Kocsis et al., 2009). Finally, combination treatment of CBASP and ADM in the acute phase seems to be superior to either treatment alone only for a subgroup of moderately depressed clients, but not for chronically depressed clients with more severe depressions (Stulz, Thase, Klein, Manber, & Crits-Christoph, 2010), stressing the need of exploring new treatment options for chronically depressed clients.

Cognitive behavioral analysis system of psychotherapy is the only type of psychotherapy that was specifically developed for the treatment of chronic depression and therefore might be superior to the other types of psychotherapy used in chronic depression. In a recent study, clients with early-onset chronic depression were randomized to either CBASP or interpersonal psychotherapy (IPT; Schramm et al., 2011). Although remission rates were remarkably higher in the CBASP group (57%) compared with the IPT group (20%), these effects could not be maintained at a one-year follow-up assessment, suggesting that the initial effects of CBASP are not enduring and that chronically depressed clients did not profit more from CBASP compared with IPT in the long run.

One important reason for the lack of enduring effects of current treatment approaches for chronic depression, including CBASP, might be the relatively

small number of treatment sessions. For example, in the study by Keller et al. (2000), chronically depressed outpatients received 16–20 sessions of CBASP, with a mean number of 16 sessions. In a recent meta-analysis of psychotherapy for chronic depression, it has been shown that the effects of psychotherapy for chronic depression increase in a dose–response relationship with the number of therapy sessions (Cuijpers et al., 2010). It is therefore likely that a longer course of psychotherapy is necessary to reach higher levels of remission at follow-up in the treatment of chronic depression.

Another treatment approach to depression that should be mentioned is emotion-focused therapy (EFT; Greenberg & Watson, 2006). EFT is an integrative treatment approach based on client-centered, experiential, and cognitive techniques with established evidence as a treatment of acute depression (Ellison, Greenberg, Goldman, & Angus, 2009; Watson, Gordon, Stermac, Kalogerakos, & Steckley, 2003). EFT is concerned with identifying and changing emotional structures (emotional schemes) that consist of emotions, cognitions, sensations, and behavioral tendencies. Results from process-outcome studies suggest that emotional processing is indeed an important predictor of therapy outcome in depression (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996; Watson & Bedard, 2006). This finding suggests that treatment for (chronic) depression might benefit from a focus on emotional processing in addition to interpersonal and cognitive interventions.

Taken together, while current treatment protocols for chronic depression are effective in treating clients to initial remission, these effects are only maintained with extensive continuation and maintenance treatments. Moreover, the response rates and effect sizes for current ADM and psychotherapeutic treatments for chronic depression, including CT and CBASP, are rather small, stressing the need to explore novel, long-term treatment options for this group of clients. Therefore, the aims of this article are to discuss the theoretical application of a promising new long-term treatment approach to chronic depression, schema therapy (ST), and to provide an overview of a treatment protocol of ST for chronic depression that is currently being tested in a single-case series.

BASIC CONCEPTS OF SCHEMA THERAPY

Early Maladaptive Schemas

According to the original ST model, early maladaptive schemas (EMSs) are at the core of psychopathology (Young et al., 2003). EMSs are stable, trait-like, enduring beliefs about oneself and the world that are rooted in early adverse childhood experiences (Young et al., 2003). Adverse childhood experiences include failure to meet the basic needs of the child, traumatic events, over nurturance, or a strong internalization of parents' dysfunctional thoughts, feelings, and behaviors. For example, children of overly nurturant parents might develop a strong dependence schema. EMSs are in many ways comparable with the concept of core beliefs in CT (Clark & Beck, 1999). However, there are also important differences between these two concepts (James, Southam, & Blackburn, 2004). Whereas core beliefs in depression are usually divided into three broad categories (helplessness, inadequacy, and unloveability), EMSs are more specific. To date, 18 specific EMSs were identified and divided into five broader categories (see Table 1).

According to the ST model, EMSs remain latent until triggered by life events, and once triggered they can evoke powerful emotional reactions in the individual. For example, a student with a strong failure schema might experience strong feelings of sadness, worthlessness, and guilt after failing an exam. Given that EMSs are assumed to be at the core of psychopathology, change from maladaptive to more adaptive schemas and coping responses is the ultimate goal of ST.

Coping Strategies

Clients with strong EMSs develop dysfunctional coping strategies to cope with or compensate for the negative emotions that they might experience when schemas are activated (Young et al., 2003). In the schema model, three types of coping responses are described: (a) schema avoidance (behaviors aimed at avoiding activation of the schema), (b) schema surrender (behaviors that confirm the schema), and (c) schema overcompensation (behaviors that are opposite to the schema). These coping strategies are maladaptive because they maintain the underlying schema. For example, clients with a strong mistrust and abuse schema might engage in schema surrender coping by being drawn into

Table 1. A brief description of all 18 early maladaptive schemas according to Young et al. (2003)

Early Maladaptive Schema	Description
Abandonment/Instability	The perceived instability or unreliability of those available for support.
Mistrust/Abuse	The expectation that others will intentionally hurt, abuse, humiliate, cheat, lie, manipulate, or take advantage.
Emotional Deprivation	The expectation that one's desire for emotional support, nurturance, empathy, or protection by others will not be met.
Defectiveness/Shame	The feeling that one is defective, bad, unwanted, inferior, or invalid.
Social Isolation	The feeling that one is isolated from the world, different from others, and not part of a community.
Dependence/Incompetence	The belief that one is not able to handle everyday responsibilities without help from others.
Vulnerability to Harm or Illness	Exaggerated fear that an unpreventable medical, emotional, or external catastrophe will strike.
Enmeshment	Excessive emotional involvement with significant others at the expense of individualization.
Failure	The belief that one has failed or will fail in areas of achievement.
Entitlement	The belief that one is superior to others and entitled to special rights and privileges.
Insufficient Self-Control	A pervasive difficulty or refusal to exercise sufficient self-control and frustration tolerance to achieve personal goals.
Subjugation	Surrendering of control to others to avoid negative consequences.
Self-Sacrifice	The excessive focus of meeting needs of others at the expense of one's own gratification.
Approval-Seeking	An excessive focus on gaining approval, recognition, or attention from others.
Negativity	A lifelong focus on the negative aspects of life while minimizing the positive aspects.
Emotional Inhibition	Inhibiting spontaneous action, feelings, or communication to avoid disapproval by others or feelings of shame.
Unrelenting Standards	The belief that one must strive to meet very high standards to avoid criticism.
Punitiveness	The belief that people should be harshly punished for mistakes.

abusive relationships, thereby confirming the validity of their schema.

ADAPTATION OF SCHEMA THERAPY TO CHRONIC DEPRESSION

Like other mental disorders, chronic depression is unlikely to be caused and maintained by a single underlying factor, but likely to arise from a set of multiple interacting factors. Since the introduction of chronic depression as a separate category in the *DSM-III*

(American Psychiatric Association, 1980), a number of studies have been conducted to determine underlying risk factors to chronic depression by comparing clients with episodic forms of depression to chronically depressed clients. While there is now evidence for a number of developmental and cognitive risk factors, the empirical evidence for the causal relation of these factors to chronic depression is inconsistent, which might be largely due to an overreliance on correlational research designs (Hölzel, Härter, Reese, & Kriston, 2011). Four risk factors to chronic depression that have received the most consistent empirical support in the literature are (a) early adversity, (b) personality (pathology), (c) cognitive factors, and (d) interpersonal factors. To describe the interplay between these factors, we developed a cognitive schema model of chronic depression (Figure 1). In this model, the effect of *distal* risk factors (early adversity) on chronic depression is mediated by *proximate* risk factors (early maladaptive schemas and dysfunctional attitudes). Proximate risk factors are triggered by current life events, such as the experience of loss or failure, and they are maintained by avoidance-related coping strategies (schema avoidance) and interpersonal behaviors that lead to schema maintenance. Interpersonal behaviors that are related to the avoidance of social situations or the avoidance of conflict (nonassertiveness) in turn contribute to the maintenance of depression through a lack of positive social reinforcement. In this model, distal risk factors can best be understood as characteristics that increase the vulnerability of a person to experience proximate risk factors. For example, experiencing childhood abuse might increase the vulnerability of developing a strong abandonment/instability schema. Proximate risk factors can best be understood as characteristics that more directly contribute to chronic depression in the context of recent triggering events. According to the model in Figure 1, a recent triggering event (for example, the recent experience of abandonment or loss) can activate an underlying EMS (for example, abandonment/instability), which in turn directly contributes to chronic depression. Although three different types of dysfunctional coping mechanisms have been mentioned, only schema avoidance was included in the model because this coping strategy is hypothesized to be the predominantly used coping strategy in clients with chronic depression. In the
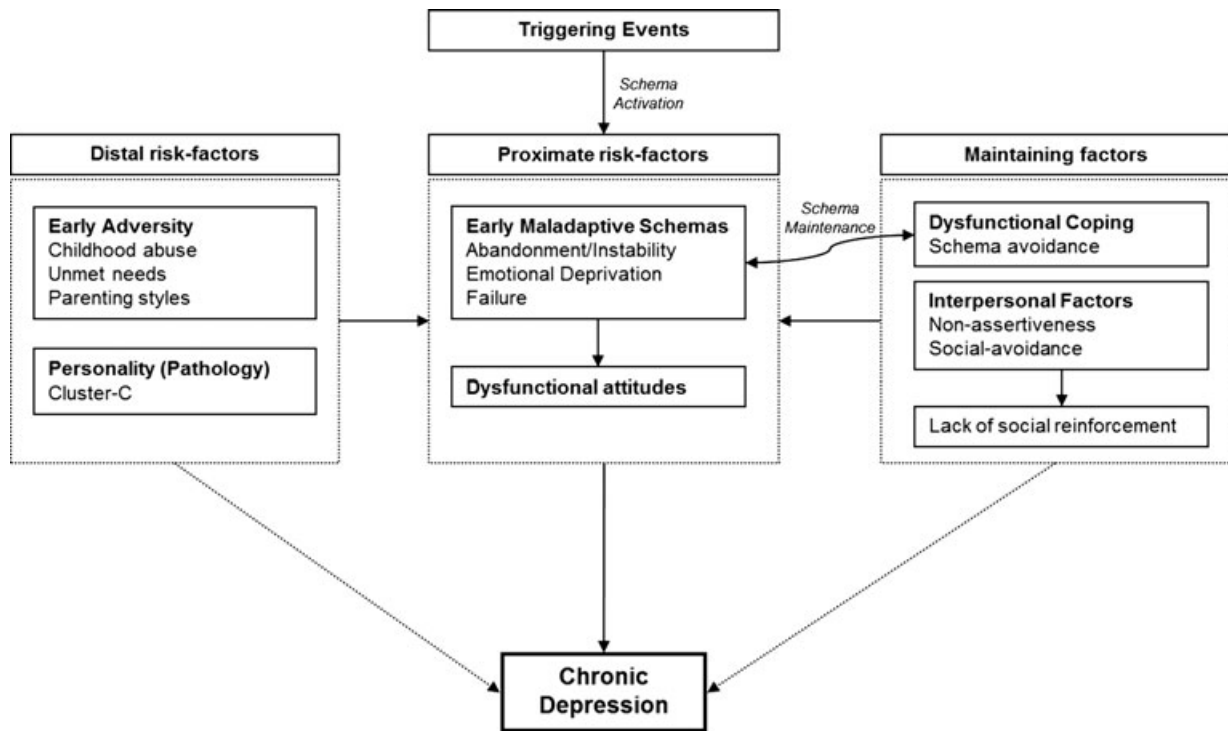
Figure 1. Cognitive schema model of chronic depression.

following section, we review the empirical evidence for each of the four risk factors for chronic depression and describe how they can be targeted in ST.

Early Adversity

Early adversity is an umbrella term for childhood experiences such as sexual, physical, and emotional abuse; physical and emotional neglect; and parental behaviors such as rejection, indifference, or overcontrol. Compared with nonchronic forms of depression, chronic depression is more often characterized by early onset (Hölzel et al., 2011), and hence, the relation of developmental factors, especially early adversity, and chronic depression has been emphasized. Previous studies relating early adversity to chronic depression found that, compared with nonchronic forms of depression, clients with chronic depression more often report childhood adverse events (Brown, Craig, Harris, Handley, & Harvey, 2007; Brown & Moran, 1994; Hayden & Klein, 2001; Lizardi & Klein, 2000), and the experience of such events has been shown to be related to lower remission rates following a 12-week protocol of

ADM (Klein et al., 2009). One large cohort study found that especial emotional abuse was related to risk for depression and that risk for depression (lifetime and current) increased gradually with the number of early adverse events in childhood (Chapman et al., 2004).

Childhood adversity usually precedes the onset of depression by several years, and the relation between childhood adverse events and chronic depression is likely mediated by proximal risk factors (Klein & Santiago, 2003). According to cognitive models of depression, the way in which children cognitively organize adverse childhood experiences in cognitive schemas determines whether the child will develop depression at a later age (Ingram, 2003). In terms of the schema model, EMSs are proximate risk factors that might mediate the relation between childhood adversity and psychopathology (Young et al., 2003). In line with this, there is evidence that the relation between childhood adversity and depressive symptoms is mediated by specific sets of EMSs in nonclinical (Harris & Curtin, 2002) and in clinical samples (Cukor & Mc-Ginn, 2006; Lumley & Harkness, 2007; McGinn,

Cukor, & Sanderson, 2005). It has also been shown that the relation between childhood adversity and depression is mediated by a depressotypic schema organization in young adults (Lumley & Harkness, 2009), a finding that has led to the conclusion that EMSs in depression should be a focus of treatment in clients with a history of early adversity.

Childhood adversity in the treatment of chronic depression is associated with decreased response to ADM (Hayden & Klein, 2001; Kaplan & Klinetob, 2000) and higher response rates to psychotherapy (Nemeroff et al., 2003). Chronically depressed clients with a history of childhood adversity might therefore benefit more from forms of psychotherapy that specifically target childhood adversity. ST places special emphasis on childhood adversity. According to the schema model, such experiences are the origin of EMSs. In schema therapy, experiential strategies, like imagery of traumatic events, are used to help the clients reexperience traumatic events in a safe therapeutic context, thereby decreasing the impact of the clients, EMSs.

Cognitive Factors

Dysfunctional cognitions in depression are usually conceptualized in terms of a hierarchical model of generality, with automatic thoughts at the most superficial level, dysfunctional attitudes at an intermediate level, and cognitive schemas (or core beliefs) at the deepest level (Clark & Beck, 1999; Segal, 1988). Most studies on cognitive factors in depression have focused on negative cognitions at the level of automatic thoughts or dysfunctional attitudes in relation to the onset and recurrences of depressive episodes and found that negative cognitive styles were related to increased likelihood of depression onset and recurrences (e.g., Alloy et al., 2006; Burcusa & Iacono, 2007; Lewinsohn, Joiner, & Rohde, 2001; Mongrain & Blackburn, 2005).

One previous study that has related cognitive factors to the course of depression focused on core beliefs at deeper levels of processing and found that avoidant and paranoid beliefs, as assessed with the Personality Beliefs Questionnaire (Beck & Beck, 1991), were related to poor outcome in cognitive therapy for depression (Kuyken, Kurzer, DeRubeis, Beck, & Brown, 2001).

In one prospective study, it has been shown that initially nondepressed individuals with high levels of negative cognitive styles and high levels of dysfunctional attitudes were more likely to experience a chronic course of depression at a 2.5-year follow-up assessment, compared with individuals with low levels of negative cognitive styles and dysfunctional attitudes (Iacoviello, Alloy, Abramson, Whitehouse, & Hogan, 2006). In line with this, it has been shown in a prospective design that individuals with highly dysfunctional cognitions were less likely to improve from a major depressive episode (Dent & Teasdale, 1988; Lewinsohn, Steinmetz, Larson, & Franklin, 1981).

Studies assessing dysfunctional cognitive processing at the schema level in chronically depressed clients are rare. In one study, it was found that clients with chronic depression exhibit higher levels of EMSs compared with nonchronically depressed clients, even after controlling for depressive symptom severity and personality disorders (Riso et al., 2003). Moreover, it has been shown that depressed clients are characterized by specific EMSs (failure, emotional deprivation, and abandonment/instability) and that these schemas remain relatively stable following outpatient treatment for depression (Renner, Lobbestael, Peeters, Arntz, and Huibers, 2012). These findings suggest that current outpatient treatments for depression leave the underlying vulnerability to depression, in terms of EMSs, largely untouched and that depressed clients with high levels of EMSs might benefit from ST (Renner, Lobbestael, et al., 2012).

Schema therapy builds on CT and hence draws from cognitive techniques that are also applied in CT for depression to decrease negative thinking patterns. The ultimate goal of ST is to decrease schematic processing that is dominated by EMSs (Young et al., 2003). Using cognitive techniques, clients learn to gather evidence that is disconfirming their schema and by doing so to *understand*, on a rational level, that their schema is false. Moreover, experiential techniques are used to help the client to *feel* on an emotional level that their schema is false. These different levels of schematic processing refer to the idea that there are different levels of meaning corresponding to rational propositional meanings (knowing cognitively) and holistic implicational meanings (knowing emotionally;

Teasdale, 1999). CT and ST both target maladaptive schemas at the deepest (schema) level of cognition, but ST also draws on experiential techniques to do so. By drawing from both cognitive and experiential techniques, ST appears to be better equipped to enable change in dysfunctional schematic processing at the schema level.

Personality Pathology

Several studies have demonstrated increased rates of Axis II psychopathology in clients with chronic forms of depression compared to clients with episodic forms of depression (Anderson et al., 1996; Fava et al., 1996; Hayden & Klein, 2001; Holmstrand, Engström, & Träskman-Bendz, 2008; Pepper et al., 1995). A number of theoretical models have been proposed to account for the relation between personality (disorders) and depression (Bagby, Quilty, & Ryder, 2008; Farmer & Nelson-Gray, 1990), but the large majority of studies relating personality disorders (PD) to chronic depression is based on cross-sectional data, and hence, the causal direction of this relation remains unclear.

Most studies on the relation between PD and depression focus on the impact of PD on treatment outcome. Recent meta-analyses suggest that comorbid PD doubles the risk of poor outcome in MDD treatment, and hence, it has been stressed that PD comorbidity should be addressed in depression treatment (Newton-Howes, Tyrer, & Johnson, 2006). Relatively fewer studies investigated the relation between PD and treatment outcome in chronically depressed clients. One study found that comorbid PD had no negative impact on treatment outcome in chronic depression (Maddux et al., 2009), whereas in another study, it was found that comorbid PD, especially borderline personality disorder (BPD), predicted lower remission rates in depressed clients (Skodol et al., 2011). A number of possible explanations might account for these differential findings. The study of Maddux et al. (2009) drew data from a randomized controlled trial, whereas the study of Skodol et al. (2011) related PDs to the course of depression in a prospective epidemiological study. Whereas the former study excluded clients with severe BPD, the latter study found that especially BPD clients had lower remission rates of depression. Whether or not comorbid PDs have a negative impact on treatment

outcome in depression might therefore depend in part on the types of PDs that are studied.

Although it remains to be investigated which specific PDs have a negative impact on treatment outcome in chronic depression, the findings that PD comorbidity is common in chronic depression and has a negative impact on treatment outcome in episodic forms of depression suggests that PD should be addressed in the treatment of chronic depression.

Schema therapy was specifically developed for clients with chronic characterological problems who often present with Axis II disorders (Young et al., 2003). With a special emphasis on characterological dysfunctional life patterns, ST has been shown to be an effective treatment for clients with BPD (Giesen-Bloo et al., 2006) and clients with Cluster-C, paranoid, histrionic, and narcissistic personality disorders (Bamelis et al., 2012). Both BPD and Cluster-C personality disorders frequently co-occur with chronic depression (Farmer & Nelson-Gray, 1990; Rothschild & Zimmerman, 2002; Russell et al., 2003) and have been shown to be related to shorter survival times to depressive relapse (Ilardi, Craighead, & Evans, 1997). Treating the underlying vulnerability to chronic depression likely also involves treating the underlying personality (features) that might drive depression and depressive relapse.

Interpersonal Factors

Depressed clients are characterized by an interpersonal style that can best be described as a blend between social avoidance and nonassertiveness (Barrett & Barber, 2007; Renner, Lobbestael, et al., 2012). This depressogenic interpersonal style remains stable after cognitive therapy (CT) for depression (Renner, Jarrett, et al., 2012). Studies relating interpersonal problems to depression chronicity are rare. In a cross-sectional design, it has been shown that chronically depressed inpatients report higher scores on the Social Avoidance subscale of the Inventory of Interpersonal Problems, compared with nonchronically depressed inpatients (Ley et al., 2011). In a prospective study, it has been shown that interpersonal problems were related to depression chronicity at a follow-up assessment and that interpersonal problems partially mediated the relation between childhood adversity and

chronic depression (Brown & Moran, 1994). Joiner (2000) developed a model of chronic depression with a strong emphasis on interpersonal factors. According to this model, chronic depression is characterized by increased negative feedback seeking, reassurance seeking, and conflict avoidance, and accordingly, these interpersonal difficulties should be addressed in the treatment of chronic depression (Joiner, 2000). Finally, it has been shown that the relation between a socially avoidant interpersonal style and depression is likely mediated by reduced social positive reinforcement (Carvalho & Hopko, 2011; Ferster, 1973).

One form of psychotherapy that specifically focuses on interpersonal stressors is interpersonal therapy (IPT) for depression (Klerman, Weissman, Rounsaville, & Chevron, 1984). IPT focuses on a number of interpersonal sources of distress, including interpersonal problems, role transitions, grief, or interpersonal deficits that are assumed to give rise to depressed mood. IPT for depression is a time-limited structured form of psychotherapy that focuses on a current acute episode of depression (Klerman et al., 1984). For example, if a client suffers from symptoms of depression following a job promotion, role transition might be the focus of treatment. In contrast to the focus on recent interpersonal sources of distress in IPT, in the current theoretical framework, interpersonal problems are conceptualized as rigid behavioral patterns in interpersonal situations. ST aims to break patterns such as a general avoidance of conflict (nonassertiveness) or avoidance of social situations by drawing from behavioral pattern-breaking techniques. Pattern breaking is the last step in schema therapy and crucial to avoid relapse and recurrences (Young et al., 2003). To achieve pattern breaking, the client and therapist work out a list of targets and then start with the most problematic behaviors. Flash cards and homework assignments are used to practice healthy behaviors outside the therapy session, whereas imagery and role-playing techniques of problematic interpersonal behaviors might be used during the therapy session. Additionally, ST draws from classical behavioral techniques such as assertiveness training to target interpersonal problems (Young et al., 2003).

It should be noted that these techniques to target interpersonal problems are not unique to ST. These techniques might also be used in other therapy models such as CT or IPT, or in assertiveness training. The strength of ST in using these techniques is that the client and the therapist can identify and deal with EMSs and schema modes that prevent the client from developing a healthier interpersonal style. For example, clients with chronic depression might have a strong side to themselves that protects them from feelings of vulnerability (detached protector mode). To break through interpersonal patterns of behavior such as avoidance of conflict, it might be necessary to bypass these protective sides to the self.

SIMILARITIES AND DIFFERENCES WITH OTHER TREATMENT APPROACHES

Several of the ST techniques that can be used to address the risk factors of chronic depression are not unique to ST but are also common to other forms of psychotherapy like CT or emotion-focused therapy (EFT). It is therefore important to distinguish these approaches from ST and to highlight the distinctive features of ST that might make this approach superior to current approaches in the treatment of chronic depression. In this section, we highlight some of the features that distinguish ST from CT because these two approaches are probably the most similar. For a detailed comparison of ST with other psychotherapy models, including emotion-focused therapy, see Young et al. (2003).

Schema therapy is based on CT, and therefore, these two treatment approaches bear great similarity (Young et al., 2003). For example, both treatments target maladaptive schemas by means of empirical verification (collaborative empiricism) to change these cognitive structures. In addition to these pure cognitive techniques, ST also places great emphasis on experiential techniques to identify specific schemas and to change schemas (Young et al., 2003). Previous research has shown that experiential techniques such as imagery rescripting have positive effects on depression in patients with primarily recurrent and chronic depression (Brewin et al., 2009). Moreover, in ST, the therapeutic relationship is used as an active ingredient to change schemas, whereas the therapeutic relationship in CT is seen as a basis for cognitive techniques to be effective rather than a therapeutic technique in itself (Young et al., 2003). In this regard, schema therapists are

equipped with a richer toolbox of therapeutic techniques that can be used to target schemas from different perspectives. Another important difference between these two treatment approaches is that ST places a greater emphasis on early childhood experiences, whereas traditional CT places more emphasis on the "here and now" (Beck, Rush, Shaw, & Emery, 1979). Accordingly, in ST, the techniques described above are also used to explore the origin of schemas in the past and to link past events to current problems.

As was argued, chronic depression is often rooted in adverse early childhood experiences that give rise to rigid, trait-like early maladaptive schemas and co-occurring personality pathology. It is therefore important that treatment of chronic depression takes into account the developmental aspects of this disorder and targets the various risk factors via multiple channels. Traditional CT is primarily focused on the "here and now" and has a stronger emphasis on purely cognitive and behavioral techniques. The strength of ST as a treatment for chronic depression is that it draws from various therapeutic techniques, not only cognitive behavioral, and has a strong focus on the developmental context in which schemas develop.

TREATMENT PROTOCOL

The treatment protocol of ST for chronic depression is based on the basic protocol of ST developed by Young et al. (2003). The treatment protocol of ST for chronic depression can be divided into three phases: (I) exploration, (II) change, and (III) relapse prevention. In the first two phases, sessions should be scheduled weekly, whereas in the last phase, the frequency of sessions should be decreased to give the client more autonomy and responsibility.

Phase I—Exploration (Sessions 1–10)

There are three main goals in the first phase of treatment. First, clients need to understand the concept of schemas and identify their predominant schemas. Second, relations between the clients' predominant schemas, their current problems, and their history are established. Third, the therapist helps the client to *experience* the feelings that are associated with their schemas by drawing from experiential techniques. For example, imagery of childhood events can be used to

identify predominant underlying schemas. In these exercises, the client is instructed to recall a distressing event from his or her childhood while the therapist observes the affective reactions of the client. Client and therapist then move from more general images to more specific images that include significant others (for example, the parents) to cover the whole range of early maladaptive schemas experienced by the client (Young et al., 2003). In contrast to the imagery techniques that are used in the change phase, imagery in the exploration phase does not include rescripting of the images.

Phase II—Change

In the change phase, different therapeutic techniques and interventions are used to work on change in EMSs, emotional experiences, and dysfunctional behaviors. Four types of interventions are used in the change phase: (a) cognitive techniques, (b) experiential techniques, (c) the therapeutic alliance, and (d) behavioral techniques.

Cognitive Techniques. Cognitive techniques are used to help the client to develop a more rational and objective way of thinking. The goal is to develop a more realistic view of the self and the world. The specific techniques that are used here are largely drawn from techniques that are used in cognitive therapy for depression (Beck et al., 1979).

Experiential Techniques. Experiential techniques are used to work on emotional experiences within the session. Experiential techniques that can be used in ST for chronic depression are imagery (rescripting) and chair dialogues. Imagery (rescripting) of current problematic situations and past experiences is used to teach the client to take different positions in, for example, unsafe, negative childhood experiences. By using these techniques, the client learns to deal with experiences of incapacity and despair, to express basic needs to others, to develop healthy defense mechanisms, to create a sense of safety in problematic situations, and to adequately express negative emotions such as anger. The therapist takes a limited reparenting stance in this phase by acting as a good parent to meet the needs that the clients' inner child has missed in the past within the

appropriate boundaries of therapeutic context. The aim is to provide the client with the needs that were not met in the past to make way for further development. For example, the therapist provides the client with solace and support while at the same time providing clear boundaries.

Another important experiential technique that can be used in ST for chronic depression is chair dialogue. Chair dialogues have their roots in Gestalt therapy and are also used in other therapy models for depression, such as emotion-focused therapy (Greenberg & Watson, 2006). In chair dialogues, every chair represents a different side of the self of the client. In schema therapy terms, these different sides of clients are referred to as schema modes. For example, depressed clients might have a strong overly demanding side (demanding parent mode) to themselves while at the same time the healthy part of the self (healthy adult mode) might be weak. Although chair dialogues are usually conducted between two sides of the client, it is also possible that more than two sides (modes) are involved (multiple chair dialogue). During chair dialogues, the client is trained to set boundaries on the impact of his or her own punishing and overly demanding sides while at the same time training to further develop and strengthen his or her own healthy side (healthy adult mode) that can care for the inner vulnerable child side (vulnerable child mode) of the client. During chair work, the therapist guides the different sides (modes) of the client through the dialogues.

Therapeutic Alliance. The therapeutic alliance is an important instrument in ST. The therapist confronts the client with the client's in-session behaviors that are driven by the client's underlying EMSs by means of empathic confrontation. For example, a client who constantly inquires about the well-being of the therapist might repeat patterns of earlier learned parentification behaviors toward the parents. By means of empathic confrontation and exploration of these behaviors, the client can learn to take a different stance. As was the case with the experiential techniques, the therapist takes the position of a good parent (limited reparenting) by exploring the needs of the client that were not met during childhood. The therapist tries to provide the client with these needs, on the one hand, while on the other hand providing the client with the means to independently care for his or her basic needs.

Behavioral Techniques. Important behavioral techniques that can be used in ST for chronic depression include role-playing, homework assignments, behavioral experiments, and assertiveness training. By using these techniques, the client learns to put the cognitive and emotional insights learned in therapy into action. For example, a student who is afraid of rejection and negative feedback by his or her supervisor can be encouraged by the therapist to discuss these issues with the supervisor and making his or her needs known by asking for objective feedback.

Phase III—Relapse Prevention

During the last phase of therapy, the client and therapist create a plan on how to prevent relapse. This includes an analysis of situations and events that might have the potential to trigger relapse and a plan for how to cope with these situations. During this last phase of therapy, sessions are scheduled with lower frequencies. The client receives more control over the sessions, and the healthy adult side of the client that was developed during the previous phase is further coached and supported by the therapist to give way to the development of more confidence and autonomy.

CONCLUDING REMARKS

Schema therapy has become a promising treatment approach for clients with difficult to treat personality disorders. While there is a need for further research on the effectiveness of ST for Axis II disorders, it is also important to consider new adaptations of ST to chronic Axis I disorders. We have argued that ST is a potentially effective treatment for chronic depression, as it targets important underlying risk factors to chronic depression. It should be noted, however, that there is no empirical evidence to date that ST is an effective treatment for clients with chronic depression. To test whether ST is a potentially effective treatment for chronic depression, we are currently conducting a single-case series of ST for chronic depression in the Netherlands (ClinicalTrials.gov Identifier: NCT01153867). In this study, 20 clients with chronic MDD receive up to 75 individual sessions of ST. In addition to

standardized assessment instruments for depressive symptom severity and potential mediators of treatment outcome, we are using an interview technique to assess schemas and core beliefs on an idiosyncratic level. Moreover, we are using functional magnetic resonance imaging (fMRI) to study the underlying neural mechanisms of change in ST. The results of this study will provide the first empirical evidence on the effectiveness of ST as a novel treatment approach to chronic MDD and first insights into the underlying (neurobiological) working mechanisms of ST for chronic depression.

Besides the need to test whether ST is a potentially effective treatment for chronic depression, it is also important to further study basic concepts of schema theory in (chronically) depressed clients. There is now some evidence that depressed clients are characterized by a specific set of EMSs, yet, research into schema modes in depression is absent. The working model of chronic depression that we presented is based on underlying factors that have received the most consistent empirical support to date. As new evidence emerges, the model can be adapted to describe the role of specific schema modes in chronic depression.

In conclusion, ST is a promising new treatment approach for clients with severe chronic depression because it directly targets the underlying vulnerability to chronic depression, as described in our working model, and is therefore likely to lead to positive and enduring outcomes. Future research on the effectiveness of ST for chronic depression needs to be conducted comparing ST to other treatment options for chronic depression in larger samples in the context of randomized clinical trials.

REFERENCES

Alloy, L. B., Abramson, L. Y., Whitehouse, W. G., Hogan, M. E., Panzarella, C., & Rose, D. T. (2006). Prospective incidence of first onsets and recurrences of depression in individuals at high and low cognitive risk for depression. *Journal of Abnormal Psychology*, *115*(1), 145–156. doi:10.1037/0021-843x.115.1.145

American Psychiatric Association (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: American Psychiatric Association.

Anderson, R. L., Klein, D. N., Riso, L. P., Ouimette, P. C., Lizardi, H., & Schwartz, J. E. (1996). *The subaffective-character spectrum subtyping distinction in primary early-onset dysthymia: A clinical and family study* (Vol. 38). Oxford, UK: Elsevier.

Arnow, B. A., & Constantino, M. J. (2003). Effectiveness of psychotherapy and combination treatment for chronic depression. *Journal of Clinical Psychology*, *59*(8), 893–905. doi:10.1002/jclp.10181

Bagby, R., Quilty, L. C., & Ryder, A. (2008). Personality and depression. *Canadian Journal of Psychiatry*, *53*(1), 14–25.

Bamelis, L. L. M., Evers, S. M. A. A., Spinhoven, P., & Arntz, A. (2012). *Results of a multicentered randomized controlled trial on the clinical effectiveness of schema therapy for personality disorders*. Manuscript submitted for publication.

Barrett, M. S., & Barber, J. P. (2007). Interpersonal profiles in major depressive disorder. *Journal of Clinical Psychology*, *63*(3), 247–266. doi:10.1002/jclp.20346

Beck, A. T., & Beck, J. S. (1991). *The Personality Belief Questionnaire*. Unpublished assessment instrument. Bala Cynwyd, PA: The Beck Institute for Cognitive Therapy and Research.

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

Brewin, C. R., Wheatley, J., Patel, T., Fearon, P., Hackmann, A., Wells, A., et al. (2009). Imagery rescripting as a brief stand-alone treatment for depressed patients with intrusive memories. *Behaviour Research and Therapy*, *47*(7), 569–576. doi:10.1016/j.brat.2009.03.008

Brown, G. W., Craig, T. K. J., Harris, T. O., Handley, R. V., & Harvey, A. L. (2007). Development of a retrospective interview measure of parental maltreatment using the Childhood Experience of Care and Abuse (CECA) instrument—A life-course study of adult chronic depression—1. *Journal of Affective Disorders*, *103*(1–3), 205–215. doi:10.1016/j.jad.2007.05.022

Brown, G. W., & Moran, P. (1994). Clinical and psychosocial origins of chronic depressive episodes: I. A community survey. *British Journal of Psychiatry*, *165*(4), 447–456. doi:10.1192/bjp.165.4.447

Browne, G., Steiner, M., Roberts, J., Gafni, A., Byrne, C., Dunn, E., et al. (2002). Sertraline and/or interpersonal psychotherapy for patients with dysthymic disorder in primary care: 6-month comparison with longitudinal 2-year follow-up of effectiveness and costs. *Journal of Affective Disorders*, *68*, 317–330. doi:10.1016/S0165-0327(01)00343-3

Burcusa, S. L., & Iacono, W. G. (2007). Risk for recurrence in depression. *Clinical Psychology Review*, *27*(8), 959–985. doi:10.1016/j.cpr.2007.02.005

Carvalho, J. P., & Hopko, D. R. (2011). Behavioral theory of depression: Reinforcement as a mediating variable between avoidance and depression. *Journal of Behavior Therapy and Experimental Psychiatry*, *42*(2), 154–162. doi:10.1016/j.jbtep.2010.10.001

Castonguay, L. G., Goldfried, M. R., Wiser, S., Raue, P. J., & Hayes, A. M. (1996). Predicting the effect of cognitive therapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology*, *64*(3), 497–504. doi:10.1037/0022-006x.64.3.497

Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of Affective Disorders*, *82*(2), 217–225. doi:10.1016/j.jad.2003.12.013

Clark, D. M., & Beck, A. T. (1999). *Scientific foundations of cognitive theory and therapy for depression*. New York, NY: Wiley.

Cuijpers, P., van Straten, A., Schuurmans, J., van Oppen, P., Hollon, S. D., & Andersson, G. (2010). Psychotherapy for chronic major depression and dysthymia: A meta-analysis. *Clinical Psychology Review*, *30*(1), 51–62. doi:10.1016/j.cpr.2009.09.003

Cukor, D., & McGinn, L. K. (2006). History of child abuse and severity of adult depression: The mediating role of cognitive schema. *Journal of Child Sexual Abuse*, *15*(3), 19–34. doi:10.1300/J070v15n03_02

Dent, J., & Teasdale, J. D. (1988). Negative cognition and the persistence of depression. *Journal of Abnormal Psychology*, *97*(1), 29–34. doi:10.1037/0021-843x.97.1.29

Ellison, J. A., Greenberg, L. S., Goldman, R. N., & Angus, L. (2009). Maintenance of gains following experiential therapies for depression. *Journal of Consulting and Clinical Psychology*, *77*(1), 103–112. doi:10.1037/a0014653

Farmer, R., & Nelson-Gray, R. O. (1990). Personality disorders and depression: Hypothetical relations, empirical findings, and methodological considerations. *Clinical Psychology Review*, *10*(4), 453–476. doi:10.1016/0272-7358(90)90048-F

Farrell, J. M., Shaw, I. A., & Webber, M. A. (2009). A schema-focused approach to group psychotherapy for outpatients with borderline personality disorder: A randomized controlled trial. *Journal of Behavior Therapy and Experimental Psychiatry*, *40*(2), 317–328. doi:10.1016/j.jbtep.2009.01.002

Fava, M., Alpert, J., Borus, J., Nierenberg, A., Pava, J., & Rosenbaum, J. (1996). Patterns of personality disorder comorbidity in early-onset versus late-onset major depression. *American Journal of Psychiatry*, *153*(10), 1308–1312.

Ferster, C. B. (1973). A functional analysis of depression. *American Psychologist*, *28*(10), 857–870.

Gelenberg, A. J., Trivedi, M. H., Rush, A. J., Thase, M. E., Howland, R., Klein, D. N., et al. (2003). Randomized, placebo-controlled trial of Nnefazodone maintenance treatment in preventing recurrence in chronic depression. *Biological Psychiatry*, *54*(8), 806–817. doi:10.1016/S0006-3223(02)01971-6

Giesen-Bloo, J., van Dyck, R., Spinhoven, P., van Tilburg, W., Dirksen, C., van Asselt, T., et al. (2006). Outpatient psychotherapy for borderline personality disorder: Randomized trial of schema-focused therapy vs transference-focused psychotherapy. *Archives of General Psychiatry*, *63*(6), 649–658. doi:10.1001/archpsyc.63.6.649

Greenberg, L. S., & Watson, J. C. (2006). *Emotion-focused therapy for depression*. Washington, DC: American Psychological Association.

Harris, A. E., & Curtin, L. (2002). Parental perceptions, early maladaptive schemas, and depressive symptoms in young adults. *Cognitive Therapy and Research*, *26*(3), 405–416. doi:10.1023/a:1016085112981

Hayden, E. P., & Klein, D. N. (2001). Outcome of dysthymic disorder at 5-year follow-up: The effect of familial psychopathology, early adversity, personality, comorbidity, and chronic stress. *American Journal of Psychiatry*, *158*(11), 1864–1870. doi:10.1176/appi.ajp.158.11.1864

Holmstrand, C., Engström, G., & Träskman-Bendz, L. (2008). Disentangling dysthymia from major depressive disorder in suicide attempters' suicidality, comorbidity and symptomatology. *Nordic Journal of Psychiatry*, *62*(1), 25–31. doi:doi:10.1080/08039480801960164

Hölzel, L., Härter, M., Reese, C., & Kriston, L. (2011). Risk factors for chronic depression—A systematic review. *Journal of Affective Disorders*, *129*(1–3), 1–13. doi:10.1016/j.jad.2010.03.025

Howland, R. H. (1993). Chronic depression. *Hospital & Community Psychiatry*, *44*(7), 633–639.

Iacoviello, B. M., Alloy, L. B., Abramson, L. Y., Whitehouse, W. G., & Hogan, M. E. (2006). The course of depression in individuals at high and low cognitive risk for depression: A prospective study. *Journal of Affective Disorders*, *93*(1–3), 61–69. doi:10.1016/j.jad.2006.02.012

Ilardi, S. S., Craighead, W. E., & Evans, D. D. (1997). Modeling relapse in unipolar depression: The effects of dysfunctional cognitions and personality disorders. *Journal*

of Consulting and Clinical Psychology, *65*(3), 381–391. doi:10.1037/0022-006x.65.3.381

Ingram, R. E. (2003). Origins of cognitive vulnerability to depression. *Cognitive Therapy and Research*, *27*(1), 77–88. doi:10.1023/a:1022590730752

James, I. A., Southam, L., & Blackburn, I. M. (2004). Schemas revisited. *Clinical Psychology & Psychotherapy*, *11*(6), 369–377. doi:10.1002/cpp.423

Joiner, T. E. (2000). Depression's vicious scree: Self-propagating and erosive processes in depression chronicity. *Clinical Psychology: Science and Practice*, 7(2), 203–218. doi:10.1093/clipsy/7.2.203

Kaplan, M. J., & Klinetob, N. A. (2000). Childhood emotional trauma and chronic posttraumatic stress disorder in adult outpatients with treatment-resistant depression. *Journal of Nervous and Mental Disease*, *188*(9), 596–601. doi:10.1097/00005053-200009000-00006

Keller, M. B., & Hanks, D. L. (1995). Course and natural history of chronic depression. In J. H. Kocsis, & D. N. Klein (Eds.), *Diagnosis and treatment of chronic depression*. (pp. 58–72). New York, NY: Guilford Press.

Keller, M. B., McCullough, J. P., Klein, D. N., Arnow, B., Dunner, D. L., Gelenberg, A. J., et al. (2000). A comparison of nefazodone, the cognitive behavioral-analysis system of psychotherapy, and their combination for the treatment of chronic depression. *New England Journal of Medicine*, *342*(20), 1462–1470. doi:10.1056/NEJM200005183422001

Klein, D. N. (2010). Chronic depression. *Current Directions in Psychological Science*, *19*(2), 96–100. doi:10.1177/0963721410366007

Klein, D. N., Arnow, B. A., Barkin, J. L., Dowling, F., Kocsis, J. H., Leon, A. C., et al. (2009). Early adversity in chronic depression: Clinical correlates and response to pharmacotherapy. *Depression & Anxiety (1091-4269)*, *26*(8), 701–710. doi:10.1002/da.20577

Klein, D. N., & Santiago, N. (2003). Dysthymia and chronic depression: Introduction, classification, risk factors, and course. *Journal of Clinical Psychology*, *59*(8), 807–816. doi:10.1002/jclp.10174

Klerman, G., Weissman, M., Rounsaville, B., & Chevron, E. (1984). *Interpersonal psychotherapy of depression*. New York, NY: Basic Books.

Kocsis, J. H. (2003). Pharmacotherapy for chronic depression. *Journal of Clinical Psychology*, *59*(8), 885–892. doi:10.1002/jclp.10180

Kocsis, J. H., Gelenberg, A. J., Rothbaum, B. O., Klein, D. N., Trivedi, M. H., Manber, R., … for the REVAMP Investigators. (2009). Cognitive behavioral analysis system of psychotherapy and brief supportive psychotherapy for augmentation of antidepressant nonresponse in chronic depression: The REVAMP trial. *Archives of General Psychiatry*, *66*(11), 1178–1188. doi:10.1001/archgenpsychiatry.2009.144

Kuyken, W., Kurzer, N., DeRubeis, R. J., Beck, A. T., & Brown, G. K. (2001). Response to cognitive therapy in depression: The role of maladaptive beliefs and personality disorders. *Journal of Consulting and Clinical Psychology*, *69*(3), 560–566. doi:10.1037/0022-006x.69.3.560

Lewinsohn, P. M., Joiner, T. E., Jr., & Rohde, P. (2001). Evaluation of cognitive diathesis-stress models in predicting major depressive disorder in adolescents. *Journal of Abnormal Psychology*, *110*(2), 203–215. doi:10.1037/0021-843x.110.2.203

Lewinsohn, P. M., Steinmetz, J. L., Larson, D. W., & Franklin, J. (1981). Depression-related cognitions: Antecedent or consequence? *Journal of Abnormal Psychology*, *90*(3), 213–219. doi:10.1037//0021-843X.110.2.203

Ley, P., Helbig-Lang, S., Czilwik, S., Lang, T., Worlitz, A., Brücher, K., & Petermann, F. (2011). Phenomenological differences between acute and chronic forms of major depression in inpatients. *Nordic Journal of Psychiatry*, *65*(5), 330–337. doi:10.3109/08039488.2011.552121

Lizardi, H., & Klein, D. N. (2000). Parental psychopathology and reports of the childhood home environment in adults with early-onset dysthymic disorder. *Journal of Nervous and Mental Disease*, *188*(2), 63–70. doi:10.1097/00005053-200002000-00001

Lumley, M. N., & Harkness, K. L. (2007). Specificity in the relations among childhood adversity, early maladaptive schemas, and symptom profiles in adolescent depression. *Cognitive Therapy and Research*, *31*(5), 639–657. doi:10.1007/s10608-006-9100-3

Lumley, M. N. & Harkness, K. L. (2009). Childhood maltreatment and depressotypic cognitive organization. *Cognitive Therapy and Research*, *33*(5), 511–522. doi:10.1007/s10608-009-9257-7

Maddux, R. E., Riso, L. P., Klein, D. N., Markowitz, J. C., Rothbaum, B. O., Arnow, B. A., et al. (2009). Select comorbid personality disorders and the treatment of chronic depression with nefazodone, targeted psychotherapy, or their combination. *Journal of Affective Disorders*, *117*(3), 174–179. doi:10.1016/j.jad.2009.01.010

Manber, R., Kraemer, H. C., Arnow, B. A., Trivedi, M. H., Rush, A. J., Thase, M. E., et al. (2008). Faster remission of chronic depression with combined psychotherapy and medication than with each therapy alone. *Journal of*

Consulting and Clinical Psychology, *76*(3), 459–467. doi:10 .1037/0022-006X.76.3.459

McCullough, J. P., Jr. (2003). Treatment for chronic depression using cognitive behavioral analysis system of psychotherapy (CBASP). *Journal of Clinical Psychology*, *59*(8), 833–846. doi:10.1002/jclp.10176

McCullough, J. P., Jr., Klein, D. N., Borian, F. E., Howland, R. H., Riso, L. P., Keller, M. B., et al. (2003). Group comparisons of DSM-IV subtypes of chronic depression: Validity of the distinctions, part 2. *Journal of Abnormal Psychology*, *112*(4), 614–622. doi:10.1037/0021- 843X.112.4.614

McGinn, L. K., Cukor, D., & Sanderson, W. C. (2005). The relationship between parenting style, cognitive style, and anxiety and depression: Does increased early adversity influence symptom severity through the mediating role of cognitive style? *Cognitive Therapy and Research*, *29*(2), 219– 242. doi:10.1007/s10608-005-3166-1

Mongrain, M., & Blackburn, S. (2005). Cognitive vulnerability, lifetime risk, and the recurrence of major depression in graduate students. *Cognitive Therapy and Research*, *29*(6), 747–768. doi:10.1007/s10608-005-4290-7

Nadort, M., Arntz, A., Smit, J. H., Giesen-Bloo, J., Eikelenboom, M., Spinhoven, P., et al. (2009). Implementation of outpatient schema therapy for borderline personality disorder with versus without crisis support by the therapist outside office hours: A randomized trial. *Behaviour Research and Therapy*, *47*(11), 961–973. doi:10.1016/j.brat.2009.07.013

Nemeroff, C. B., Heim, C. M., Thase, M. E., Klein, D. N., Rush, A. J., Schatzberg, A. F., et al. (2003). Differential responses to psychotherapy versus pharmacotherapy in patients with chronic forms of major depression and childhood trauma. *Proceedings of the National Academy of Sciences of the United States of America*, *100*(24), 14293–14296. doi:10.1073/pnas .2336126100

Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: Meta- analysis of published studies. *British Journal of Psychiatry*, *188*(1), 13–20. doi:10.1192/bjp.188.1.13

Nordahl, H. M., Holthe, H., & Haugum, J. A. (2005). Early maladaptive schemas in patients with or without personality disorders: Does schema modification predict symptomatic relief? *Clinical Psychology & Psychotherapy*, *12* (2), 142–149. doi:10.1002/cpp.430

Pampallona, S., Bollini, P., Tibaldi, G., Kupelnick, B., & Munizza, C. (2004). Combined pharmacotherapy and psychological treatment for depression: A systematic

review. *Archives of General Psychiatry*, *61*(7), 714–719. doi:10.1001/archpsyc.61.7.714

Pepper, C., Klein, D., Anderson, R., Riso, L., Ouimette, P., & Lizardi, H. (1995). DSM-III-R Axis II comorbidity in dysthymia and major depression. *American Journal of Psychiatry*, *152*(2), 239–247.

Renner, F., Jarrett, R. B., Vittengl, J. R., Barrett, M. S., Clark, L. A., & Thase, M. E. (2012). Interpersonal problems as predictors of therapeutic alliance and symptom improvement in cognitive therapy for depression. *Journal of Affective Disorders*, *138*(3), 458–467. doi:10.1016/j.jad.2011.12.044

Renner, F., Lobbestael, J., Peeters, F., Arntz, A., & Huibers, M. (2012). Early maladaptive schemas in depressed patients: Stability and relation with depressive symptoms over the course of treatment. *Journal of Affective Disorders*, *136*(3), 581–590. doi:10.1016/j.jad.2011.10.027

Riso, L. P., du Toit, P. L., Blandino, J. A., Penna, S., Dacey, S., Duin, J. S., et al. (2003). Cognitive aspects of chronic depression. *Journal of Abnormal Psychology*, *112*(1), 72–80. doi:10.1037/0021-843X.112.1.72

Riso, L. P., & Newman, C. F. (2003). Cognitive therapy for chronic depression. *Journal of Clinical Psychology*, *59*(8), 817–831. doi:10.1002/jclp.10175

Rothschild, L., & Zimmerman, M. (2002). Personality disorders and the duration of depressive episode: A retrospective study. *Journal of Personality Disorders*, *16*(4), 293–303. doi:10.1521/pedi.16.4.293.24129

Russell, J. M., Kornstein, S. G., Shea, M. T., McCullough, J. P., Harrison, W. M., Hirschfeld, R. M. A., et al. (2003). Chronic depression and comorbid personality disorders: Response to sertraline versus imipramine. *Journal of Clinical Psychiatry*, *64*(5), 554–561.

Schramm, E., Zobel, I., Dykierek, P., Kech, S., Brakemeier, E.-L., Külz, A., et al. (2011). Cognitive behavioral analysis system of psychotherapy versus interpersonal psychotherapy for early-onset chronic depression: A randomized pilot study. *Journal of Affective Disorders*, *129* (1–3), 109–116. doi:10.1016/j.jad.2010.08.003

Segal, Z. V. (1988). Appraisal of the self-schema construct in cognitive models of depression. *Psychological Bulletin*, *103* (2), 147–162.

Skodol, A. E., Grilo, C. M., Keyes, K. M., Geier, T., Grant, B. F., & Hasin, D. S. (2011). Relationship of personality disorders to the course of major depressive disorder in a nationally representative sample. *American Journal of Psychiatry*, *168*(3), 257–264. doi:10.1176/appi.ajp.2010.10050695

Smit, F., Cuijpers, P., Oostenbrink, J., Batelaan, N., de Graaf, R., & Beekman, A. (2006). Costs of nine common

mental disorders: Implications for curative and preventive psychiatry. *Journal of Mental Health Policy and Economics*, *9* (4), 193–200.

Stulz, N., Thase, M. E., Klein, D. N., Manber, R., & Crits-Christoph, P. (2010). Differential effects of treatments for chronic depression: A latent growth model reanalysis. *Journal of Consulting and Clinical Psychology*, *78*(3), 409–419. doi:10.1037/a0019267

Teasdale, J. D. (1999). Emotional processing, three modes of mind and the prevention of relapse in depression. *Behaviour Research and Therapy*, *37*(Suppl. 1), S53–S77. doi:10.1016/s0005-7967(99)00050-9

Thase, M. E. (1999). When are psychotherapy and pharmacotherapy combinations the treatment of choice for major depressive disorder? *Psychiatric Quarterly*, *70*(4), 333–346. doi:10.1023/a:1022042316895

Thase, M. E., Greenhouse, J. B., Frank, E., Reynolds, C. F., III, Pilkonis, P. A., Hurley, K., et al. (1997). Treatment of major depression with psychotherapy or psychotherapy-pharmacotherapy combinations. *Archives of General Psychiatry*, *54*(11), 1009–1015. doi:10.1001/archpsyc.1997.01830230043006

Torpey, D. C., & Klein, D. N. (2008). Chronic depression: Update on classification and treatment. *Current Psychiatry Reports*, *10*, 458–464.

Watson, J. C., & Bedard, D. L. (2006). Clients' emotional processing in psychotherapy: A comparison between cognitive-behavioral and process-experiential therapies. *Journal of Consulting and Clinical Psychology*, *74*(1), 152–159. doi:10.1037/0022-006x.74.1.152

Watson, J. C., Gordon, L. B., Stermac, L., Kalogerakos, F., & Steckley, P. (2003). Comparing the effectiveness of process-experiential with cognitive-behavioral psychotherapy in the treatment of depression. *Journal of Consulting and Clinical Psychology*, *71*(4), 773–781. doi:10.1037/0022-006X.71.4.773

Wells, K. B., Burnam, M. A., Rogers, W., & Hays, R. (1992). The course of depression in adult outpatients: Results from the medical outcomes study. *Archives of General Psychiatry*, *49*(10), 788–794. doi:10.1001/archpsyc.1992.01820100032007

Young, J. E., Klosko, J., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*. New York, NY: Guilford Press.