Depression: Theory, assessment, and new directions in practice

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ABSTRACT. This theoretical study describes the phenomenon of depression and the use of cognitive therapy in its treatment. It discusses the nature of depression, the cognitive therapy of depression, and common cognitive assessment instruments of depression as well as some treatment techniques. Depression consists of five different manifestations; emotional, cognitive, motivational, vegetative & physical, and delusional, although it is the emotional manifestation which we tend to think of as depression. Three levels of cognition; characteristic self-statements, cognitive distortions, and core cognitive beliefs are discussed. Self-statement (or cognitive content) modification focuses on assessing, evaluating, and changing current automatic thoughts or self-statements. Cognitive distortions (or cognitive processes) are systematic errors in logic and reasoning that result in negative automatic thoughts. Core cognitive beliefs or schemas are clusters of cognitive self-statements organized around one or more themes and have also been referred to as conditional beliefs or tacit knowledge structures. A variety of cognitive depression instruments are discussed. The include the Automatic Thoughts Questionnaire, the Beck Depression Inventory, the Dysfunctional Attitude Scale and others. A wide variety of therapeutic interventions for overcoming depression are presented. The reader is cautioned that the relapse rate in depression is high.


RESUMEN. Este artículo describe el fenómeno de la depresión y el uso de la terapia cognitiva como tratamiento. Se explora la naturaleza de la depresión, la terapia cognitiva,
así como instrumentos de evaluación cognitiva. La depresión se muestra en cinco manifestaciones diferentes (emocional, cognitiva, motivacional, vegetativa y física, y delusoria), aunque es la manifestación emocional la que solemos considerar como depresión. Tres niveles de cognición son discutidos: autoverbalizaciones, distorsiones cognitivas y creencias cognitivas. La modificación de autoverbalizaciones (o contenido cognitivo) se enfoca en la evaluación y en el cambio de los actuales pensamientos automáticos. Las distorsiones cognitivas (o procesos cognitivos) son errores sistemáticos de la lógica y el razonamiento que dan resultado a pensamientos negativos automáticos. Las creencias cognitivas o esquemas son grupos de autoverbalizaciones cognitivas basadas en uno o más temas y que también se refieren a creencias condicionales o estructuras de conocimiento tácito. Se describen diversos instrumentos de evaluación cognitiva de la depresión: *Automatic Thoughts Questionnaire*, *Beck Depression Inventory*, *Dysfunctional Attitude Scale*, etc. Se presenta una gran variedad de intervenciones terapéuticas para superar la depresión y se advierte al lector que la pauta de recaída de la depresión es alta.

**PALABRAS CLAVE.** Depresión. Terapia cognitiva. Estudio teórico.

**RESUMO.** Este estudio teórico descreve o fenómeno da depressão e o uso da terapia cognitiva no seu tratamento. Discute a natureza da depressão, a terapia cognitiva da depressão, e instrumentos de avaliação cognitiva da depressão assim como algumas técnicas de tratamento. A depressão consiste de cinco manifestações diferentes: emocional, cognitiva, motivacional, vegetativa & física, e alucinatória, apesar de ser a manifestação emocional que tendemos a pensar como depressão. São discutidos três níveis de cognição; auto-afirmações características, distorções cognitivas, e crenças cognitivas nucleares. A modificação de auto-afirmações (ou conteúdo cognitivo) focaliza-se na avaliação e mudança de pensamentos e auto-afirmações automáticas. Distorções cognitivas (ou processos cognitivos) são erros sistemáticos na lógica e raciocínio que resultam em pensamentos automáticos negativos. Esquemas ou crenças cognitivas nucleares são agrupamentos de auto-afirmações organizadas em volta de um ou mais temas e têm sido referidas como crenças condicionais ou estruturas de conhecimento tácito. São discutidos vários instrumentos de depressão cognitiva, entre eles o *Automatic Thoughts Questionnaire*, o *Beck Depression Inventory*, o *Dysfunctional Attitude Scale*. É apresentada uma larga variedade de intervenções terapêuticas para lidar com a depressão. O leitor é avisado que o grau de recaída na depressão é elevado.

**PALAVRAS CHAVE.** Depressão. Terapia cognitiva. Estudo teórico.

Depression is undoubtedly the most common mental health problem, especially when its milder form - dysphoria - is also included. In the United States, it is often called “The common cold of mental health.” Most people occasionally are affected and in most cases it is self-limiting. But sometimes it is not self-limiting and requires psychological or psychiatric treatment and it is certainly more serious than a cold! In this article I shall discuss the nature of depression, the cognitive therapy of depression, and common cognitive assessment instruments of depression as well as some treatment techniques.
First, let me distinguish among dysthymia, bipolar depression, and unipolar depression. Dysthymia is defined by the DSM IV-TR (American Psychiatric Association, 2000) as “a chronically depressed mood that occurs for most of the day more days than not for at least 2 years.” During periods of depressed mood, at least two of the following additional symptoms are present: poor appetite or overeating, trouble sleeping or too much sleeping, low energy or fatigue, low self-esteem, poor concentration or difficulty making decisions, and feelings of hopelessness. Because of the long-standing and pervasive nature of these symptoms, individuals may not even report them. They might say, “I’ve always been that way.” Others see them always “down” or sad. Dysthymia is a low-grade chronic depression very much like a low-grade fever.

Bipolar depression was once called manic-depressive disorder and is characterized by mood swings from mania to depression. Sometimes the mania is greater than the depression and sometimes the depression is greater than the mania. Sometimes the cycles are long and sometimes the cycles are short. Bipolar disorder is a true medical condition and medication is the treatment of choice (Basco and Rush, 1996). All that cognitive therapy or indeed any therapy can do is to help the patients manage their medication. Unipolar depression, generally major depressive disorder, is what is commonly meant by the word, “depression.” It is characterized by one or more major depressive episodes (DSM-IV-TR). An episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities. There are also additional symptoms such as changes in appetite or weight, sleep difficulties, decreased energy, feelings of worthlessness or guilt, difficulty in thinking or concentrating, recurring thoughts of death, or thoughts or plans of suicide. To observers, this appears serious and obvious. While symptoms such as crying or emotional sadness are the most obvious symptoms, other features such as difficulty making decisions, loss of interest in pleasurable activities, and motivational problems can also indicate depression, although perhaps not as obviously. Depression consists of five different manifestations: emotional, cognitive, motivational, vegetative & physical, and delusional (A.T. Beck, 1967). It is the emotional manifestation that we tend to think of as depression.

The original model of depression as developed by Aaron T. Beck (A.T. Beck, Rush, Shaw, and Emery, 1979) saw it as characterized by a negative view of the self (e.g. “I am a loser”), the world (e.g. people will hurt me if I give them a chance”), and the future (e.g. things will never get better, only worse”). Beck was careful not to say that these dysfunctional thinking patterns necessarily caused depression (though they might in some circumstances) but that they were associated with depression. A complex mixture of biological variables, social factors, and psychological aspects likely causes depression. But there appears to be a cycle of cognition, affect or emotion, and behavior resulting in what has been called the downward spiral of depression. For example, the thought, “I am a hopeless loser” in response to a bad life event such as the loss of employment can result in feelings of sadness and apathy. Therefore the individual does not even look for other employment that in turn leads to further negative self-talk as well as further depressive feelings. But it is not even certain what causes cognitive change in cognitive behavior therapy (Whisman, 1993). Does the therapy directly change cognitive phenomena such as negative self-talk? Does the therapy provide a set of skills
that helps patients handle these negative self-statements when they do occur? Does the
cognitive rationale provide hope and optimism? We don’t yet know. Whether the thoughts
or the behavior comes first, it appears that changing these dysfunctional thinking patterns
can reduce depression. On the other hand, as I showed in a study years ago (Kelly,
Dowd, and Duffey, 1983), depressed patients became less depressed as a result of
therapy when behavioral strategies were used first and then followed by cognitive
strategies rather than the reverse. When cognitive strategies were followed by behavioral
strategies, there was a period of relapse and the patients never did improve as much as
those in the first group. Perhaps, as A.T. Beck et al. (1979) pointed out years ago, it
is better to begin with behavioral change strategies.

Cognitive therapy has been shown to be of great benefit in helping clients to
overcome unipolar depression as well as probably dysthymia. A number of outcome
studies have consistently shown that cognitive behavior therapy is at least as effective
as pharmacotherapy (medication maintenance) for the treatment of acute symptoms.
The famous study in the United States sponsored by the National Institute of Mental
Health (NIMH) showed that cognitive therapy, interpersonal therapy, and pharmacotherapy
(Imipramine) were equally effective with less severe cases of depression but that
Imipramine was more effective for people with more severe depression (Elkin et al.,
1989). However, some later studies have showed that cognitive behavior therapy is at
least as effective as pharmacotherapy even for severely depressed patients (e.g. DeRubeis,
therapy was not used appropriately in one of the sites in the original NIMH study so
perhaps those results should not be seen as the best comparison of cognitive therapy
with other treatments for depression.

Keith Dobson and his colleagues have performed two meta-analyses (Dobson,
1989; Dobson & Dozois, 1998) that have examined comparisons of cognitive therapy
for depression to alternative therapies and control groups. Dobson (1989) found that
cognitive therapy was superior in outcome to all comparisons, including wait list and
placebo, medications, behavior therapy, and other psychotherapies. He admitted, however,
that some of the studies he used were methodologically weak and the number of studies
for some comparisons was small. In an attempt to remedy these problems, he conducted
a second meta-analysis that investigated follow-up effects and used the Hamilton Rating
Scale in addition to the Beck Depression Inventory. The results of the second meta-
analysis were considerably less optimistic. Only the comparison of cognitive therapy to
wait list and placebo groups was consistently significant.

While even the most promising of these studies have not shown that cognitive
behavior therapy is consistently and significantly better than alternative forms of treatment,
there have been follow-up studies that indicate that cognitive behavior therapy may be
associated with lower rates of relapse than other treatments (e.g. Evans et al., 1992;
Hollon, 2003; Nezu, Nezu, Trunzo, and McClure, 1998). Thus, cognitive therapy may
provide patients with coping skills or revised thinking patterns they can use in handling
future problems.

In summary, cognitive behavior therapy has been shown to be useful in helping
people to overcome or at least reduce their level of depression. While it has not been
shown to be consistently and significantly better than alternative treatments, it seems
to be at least as effective even for cases of serious depression. There is even evidence
that it may be especially valuable in preventing relapse.

Originally, the cognitive behavior therapy of depression focused on assessing,
evaluating, and changing automatic thoughts or self-statements. These are the types of
thoughts that people have about many events in their lives, such as, “I’ll never understand
this class” or, “I’ll never be able to give a good speech.” These are thoughts or verbal
images that are involuntary and are part of the human stream of consciousness. In
healthy people, these thoughts consist of a mixture of positive and negative, with more
of the former than the latter. In depression they are mostly negative. They are sometimes
referred to as surface cognitions or cognitive content. Because they are involuntary and
unrecognized they are not evaluated to see if they are true or even plausible. Although
they are unrecognized, patients can usually begin to recognize them with help from the
therapist. The early cognitive therapy for depression focused on identifying these negative
automatic thoughts and evaluating the evidence for and against them. The unspoken
assumption was that this evaluation would demonstrate to patients how unrealistic their
negative automatic thoughts really were so they could be replaced with presumably
more realistic and positive automatic thoughts.

However, Alloy and Abramson (1979) found something really quite annoying.
They discovered “depressive realism” which means that depressed people often perceive
things more realistically and accurately than do nondepressed people! Taylor and Brown
(1988) reviewed evidence that demonstrated unrealistically positive self-perceptions
are related to better mental health. In partial support, another study (Wright, 2000)
found that students who were unrealistically positive about their academic abilities
received higher grades the following term than students who were realistic or unrealistically
negative about their abilities. In general, it has been found that most people think they
are above average, which is a statistical impossibility. Therefore, a certain amount of
self-deception may be helpful to people’s mental health and even their behavior and
may act as an antidote to depression. Too much honesty about yourself may be bad for
your mental health! Unrealistically positive views may not always be best, however.
Colvin, Block, and Funder (1995) found that overly positive self-evaluations (compared
to trained examiners or friends) resulted in more negative interpersonal ratings of their
personality characteristics by these raters. Schwartz and Garamoni (1989) found that an
optimal level of mental health was characterized by a ratio of positive to negative self-
statements of .62. A ratio well below 50-50 was associated with depression whereas a
ratio well about .62 was associated with an overly “Pollyannaish” attitude. An internal
dialogue of 50% - 50% was called the “internal dialogue of conflict.” Perhaps a little
self-delusion is helpful but much self-delusion is not.

The automatic thoughts are examples of what we think. The next level of cognition
is known as cognitive processes. These are the cognitive distortions identified by J.S.
Beck and are examples of how we think. They can be thought of as systematic errors
in logic and reasoning that result in negative automatic thoughts, such as personalization,
dichotomous thinking, magnification/minimization, and discounting the positive. There
are other cognitive models that look at cognitive processing errors that may be associated
with depression. The helplessness/hopelessness theory of depression (Abramson, Metalsky, and Alloy, 1989) suggested that depression is caused by internal, stable, and global attributions for bad events and external, unstable, and specific attributions for good events. Miner and Dowd (1996) found that negative life events, current problems, and problem solving ability were each related to depression. Negative social comparisons, in which we compare ourselves negatively to others, is also associated with depression. Self-esteem seems to be a mediating variable because it acts as a buffer to depression in people who otherwise might be expected on the basis of their cognitive content and cognitive processes to become depressed. Pengilly and Dowd (2000) found the level and amount of social support to be important as a buffer to depression.

The third level of cognition is that of schemas or enduring structural components of cognition, sometimes known as tacit or implicit knowledge (Dowd and Courchaine, 1996). Self-schemas, or schemas about one’s self, are especially important. Schemas can be seen as clusters of cognitive self-statements organized around one or more themes and have also been referred to as conditional beliefs or core cognitive schemas (J.S. Beck, 1995). An example of a conditional belief might be, “If I never offend anyone, then people will like me.” Examples of core beliefs are, “I’m inadequate, I’m unlovable,” “I’m a failure,” or “People can’t be trusted.” These can be seen as tacit rules about oneself, the world, and one’s place in the world. Notice how the first two examples are restatements of Freud’s answer regarding what people ought to be able to do well; “Lieben und Arbeiten.” (To love and to work). These rules are laid down early in life, often before children can use language well, so they are extremely resistant to assessment and change. They are typically experienced by people as, “That’s just the way things are!”

Perhaps the most comprehensive organization of core cognitive schemas are the Early Maladaptive Schemas (EMSs) developed by Young (2003). He defined a schema as a broad and pervasive theme or pattern regarding one’s self and relationship to others, that developed during childhood or adolescence, and that is dysfunctional. There are currently 18 EMSs that are organized into five clusters. Young hypothesized that patients generally have two, sometimes three, dysfunctional EMSs that may be responsible for their problems. Several of these EMSs may be associated with depression, such as Emotional Deprivation, Abandonment/Instability, Defectiveness/Shame, and Failure.

There are a variety of ways of measuring depression. Perhaps the best known is the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mook, and Erbaugh, 1961). The BDI consists of 21 items, which are rated for intensity on a scale of 0 to 3, and reflect attitudes and symptoms frequently shown in depressed patients. It is a self-report measure and is best used as a measure of the severity of depression. It can be especially useful for measuring session-by-session changes in depression. Because the BDI scores can be elevated for reasons other than depression (e.g. low self-esteem), it should not be used to assess the presence of depression. It is commonly used, however, for this purpose.

Spielberger, Ritterband, Reheiser, and Brunner (2003) attempted to identify two separate factors of cognitive and affective components of depression, measured collectively by 40 items drawn from the BDI and three other depression measures. Instead of finding cognitive and affective factors, however, they found two factors that identified the presence (Dysthymia) or absence (Euthymia) of state and trait depression.
Spielberger and his colleagues have also investigated psychometric data for the Spanish experimental version of the State-Trait Depression Questionnaire. Spielberger, Carretero-Dios, de los Santos-Roig, and Buela-Casal (2002a), investigating the Trait sub-scale, found an internal consistency reliability of .95 and a test-retest reliability (3+ months) of .71. The correlation between the State-Trait Anxiety Inventory (Spielberger, Gorsuch, and Lushene, 1970) and all scales in the study was high, indicating a significant correlation between anxiety and depression. Women scored as more depressed than men. Again, two factors of Dysthymia and Euthymia were identified. Spielberger, Carretero-Dios, de los Santos-Roig, and Buela-Casal (2002b), investigating the State sub-scale, found they were able to induce State depression by appropriate experimental manipulations, indicating the scale is a sensitive measure of transitory depression. They also found two factors, Dysthymia and Euthymia.

The Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967) is a clinician-scored measure that can be used to assess the presence of depression. Its 17 items are scored by one or two trained observers and can assess affective (emotional), cognitive, behavioral, and vegetative (lack of motivation) components of depression. Because clinicians score it, it is less vulnerable to self-presentational bias.

There are several measures of depressive cognitions. The Automatic Thoughts Questionnaire (ATQ; Hollon and Kendall, 1980) assesses the frequency with which 30 depression-related thoughts have spontaneously entered the patient’s head during the last week. The Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, and Trexler, 1974) is a measure of the hopelessness component of depression and is a good measure of suicide potential. The Daily Record of Dysfunctional Thoughts (A. T. Beck et al., 1979) is a less-structured instrument in which patients record their spontaneous automatic thoughts in situations that arouse unpleasant emotions. The Cognitive Bias Questionnaire (CBQ; Hammen and Krantz, 1976) assesses dysfunctional cognitive processes by asking patients to select one of four possible responses to six problematic situations. The Dysfunctional Attitude Scale (DAS; Weissman and Beck, 1978) is used to measure core assumptions, beliefs, and tacit rules about self-evaluation and assesses the extent to which patients agree with certain depressogenic beliefs and attitudes. These are most commonly concerning social approval and perfectionist standards of performance. The Cognitive Response Test (CRT; Watkins and Rush, 1983) provides a more open-ended measure of dysfunctional depressive thinking. Patients are asked to complete sentences such as, “When I consider being married...” with the first thought that comes into their mind. Responses are scored according to criteria for irrational depressive thinking.

I now present some therapeutic interventions for overcoming depression. First, let me caution the reader that the relapse rate for depression, regardless of the type of therapy used, is rather high. In general, the more severe the depression and the more frequent the depressive episodes, the more likely the patient is to relapse. But, as I mentioned earlier, cognitive therapy appears to reduce relapse more than some other therapies.

A.T. Beck et al. (1979), in their *Cognitive Therapy of Depression*, included a list of techniques. This list has been expanded over the years and now has become quite comprehensive. For example, Rian Mullin, in his *Handbook of Cognitive Therapy*...
Techniques (1986), lists 75 different techniques and this list is not comprehensive. Some of the more common cognitive therapy techniques that might be useful in reducing depression are shown in Table 1.

### Table 1. Typical Techniques in Cognitive Therapy.

<table>
<thead>
<tr>
<th>Behavioral</th>
<th>Cognitive</th>
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<tr>
<td>- Activity scheduling/monitoring</td>
<td>- Evaluating automatic thoughts</td>
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<td>- Positive self-statement logs</td>
<td>- Identifying underlying beliefs</td>
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<td>- Behavioral experiments</td>
<td>- Restructuring beliefs</td>
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<tr>
<td>- Exposure hierarchies</td>
<td>- Modifying images</td>
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<tr>
<td>- Graded task assignments</td>
<td>- Labeling distortions</td>
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<tr>
<td>- Distraction techniques</td>
<td>- Cognitive rehearsal</td>
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<tr>
<td>- Relaxation exercises</td>
<td>- Self-instruction</td>
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<tr>
<td>- Acting “as if”</td>
<td>- Thought-stopping</td>
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<tr>
<td>- Social skills training</td>
<td>- Flash cards/posters</td>
</tr>
<tr>
<td>- Assertiveness training</td>
<td>- Historical exploration &amp; review of the evidence</td>
</tr>
<tr>
<td>- Time management</td>
<td>- Role playing</td>
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<tr>
<td>- Exercise</td>
<td>- Imaging feared consequences (“What’s the worst...?”)</td>
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<tr>
<td>- Reduction of stimulants</td>
<td>- Problem-solving</td>
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<tr>
<td>- Active listening to therapy tape</td>
<td>- Examining advantages &amp; Disadvantages</td>
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Recent research in the cognitive therapy of depression has shown the importance of the cognitive diathesis-stress model of depression. This model proposes that negative cognitions are a vulnerability factor that interacts with negative life events (e.g. stress) to contribute to the onset and maintenance of depression. Thus, people who have a negative cognitive style are more likely to become depressed when they experience stressful life events than are people who do not have such a style. Hilsman and Garber (1995) found this was true. Students who reported a negative, depressive, explanatory style for their lack of academic control and competence reported more distress after receiving poor grades than did students without such cognitions. Overholser (1996) found that depressed patients reported experiencing significantly more stressful life events during the last six months than did nondepressed people. There is also a significant correlation between the number of negative life events experienced over time and the level of depression. A depressive episode may be triggered by a stressful life event. Of course, the direction of causality is not always clear. Are people depressed because of stress in their lives or do they report more stress because they are depressed? Does the direction matter? In any event, there are techniques that we can use to reduce stress and therefore depression. These are shown in Table 2.
TABLE 2. Coping with Precipitating Events.

1. **Reduce habitual reactions.** Disrupt the habit basis of maladaptive coping. Encourage or push a small change to start a “ripple effect.”

2. **Reduce coping by avoidance.** Includes reducing negative emotions by alcohol or drug use, overeating, avoiding people, or thoughts related to the problem. These avoidance strategies are strongly related to depression.

3. **Reduce tendencies for social withdrawal.** Depression has been linked with withdrawing from people and events and (e.g.) watching television.

4. **Reduce tendencies for rumination and blame.** Patients may ruminate, blame themselves for past events, engage in wishful thinking. May ask unproductive questions like, “Why did this happen to me? Self-blame immobilizes and depresses.

5. **Reduce perfectionistic tendencies.** Depressed people may have unrealistically high standards and use dichotomous thinking.

6. **Reduce confrontation with others.** People may respond to stress by being hostile or aggressive to others.

7. **Confront the problem directly.** Depressed patients tend to avoid the problem and engage in “emotion-focused” coping. Encourage “Task focused” Coping, e.g. “What will you do - and when - and how?”

8. **Maintain a sense of control.** Repeated failure promotes a sense of helplessness, which increases depression, which reduces control, etc... Perceived uncontrollability reduces patients’ motivation. Encourage small actions which can increase feelings of control.

9. **Use problem-solving techniques.** Lack of effective problem-solving can make people vulnerable to depression. Art Nezu and his colleagues have developed a problem solving therapy for depression Nezu et al., 1998). Therapist can be a “problem-solver” and apply the 5 processes (problem orientation, problem definition and formulation, generation of alternatives, decision making, solution implementation and verification).

10. **Focus on solutions instead of problems.** This encourages a hopeful, future-orientation instead of a past, hopeless orientation.

11. **Focus on positive and happy experiences.** Depressed people are likely to attribute negative life experiences to internal, stable, global causes. Help them to reattribute through examination of the evidence. Also, through mood state congruence, depressed people have great difficulty remembering times when they were happy. Use of positive thoughts can help reduce depressive effects of negative life events.

12. **Utilize client’s social resources.** Availability of family and social resources can help reduce depression.

13. **Help clients express negative emotions but do not dwell on them.** It will increase depression in the short run.

14. **Use Reframing.** It is the examination of the positive aspects of a situation commonly interpreted as negative.

In summary, the cognitive therapy of depression is considerably more complex than we once thought. A.T. Beck’s et al. (1979) original proposal that it could be cured in 16 session now seems overly optimistic - though that still might be true in cases of first-episode, acute depression. But recurrent, characterological depression may have biological, historical, and social causes - as well as situational causes. Relapse is more of a problem than we once thought and the more depressive episodes people have had, the more likely they are to relapse. It is truly a demanding problem.
References


