THEORY

A Clinical Biopsychological Theory of Loss-Related Depression

Robert A. Moss

Bon Secours St. Francis Hospital

Abstract

Opponent-process theory has been discussed in relation to a number of behaviors, including addiction. More recently, it has been suggested that this theory plays a primary role in explaining loss-related depression symptoms. The current paper discusses the foundation for this view from a clinical biopsychological perspective. It discusses both treatment implications and theoretical issues, concluding with a call for further investigation into the clinical biopsychological approach.

Keywords: depression, loss, opponent-process theory, clinical biopsychology, columnar model, dimensional systems model

Correspondence concerning this article should be addressed to Robert A. Moss, Bon Secours St. Francis Hospital, 1 St. Francis Drive, Greenville, SC 29601. E-mail: rmoss@emotionalrestructuring.com

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A Clinical Biopsychological Theory of Loss-Related Depression

The past 20 years has witnessed an explosion in brain research. This has largely been the result of new and improved technology in brain imaging. Despite these advances, the lack of a clear understanding of the neural code by which cortical processing occurs and memory is stored has led to ongoing debates as to how best to understand cortical functioning. A recent series of articles in *Psychological Review* discussing localist versus distributed processing views demonstrates the lack of agreement on how memories are stored (Bowers, 2009, 2010; Plaut & McClelland, 2010; Quian Quiroga & Kreiman, 2010).

In a 2006 article, Moss proposed the dimensional systems model (DSM) of cortical operations based on the cortical column (i.e., macrocolumn) as the binary unit involved in processing and memory storage. The model was subsequently updated and expanded to show how a columnar model can explain synchronicity and the role that the hippocampus plays in the formation of cortical memories (Moss, Hunter, Shah, & Havens, 2012). Based on this model, a clinical biopsychological model (CBM) has been proposed (Moss, 2001, 2007, 2010, 2013) for the understanding of psychological problems. Although loss and an inability to activate previously stored positive emotional memories represent one of the three areas highlighted in the theory, there has to date been no elaboration on how the model specifically applies to issues of loss and depression. The current paper is directed toward this goal.

Clinical Biopsychological Theory

The two cortices are considered to be semi-independent functioning minds. Within the suggested parallel processing design, whichever side can best respond to an ongoing situation is the side that assumes control of the ensuing response. Both hemispheres receive similar sensory input. The posterior lobes (i.e., the parietal, temporal, and occipital) are involved in processing and memory storage linked to incoming sensory information, while the frontal lobes are involved in analysis, planning, and response initiation as well as the memories associated with such activities. The left cortex processes sensory information in a detailed manner, with the result that it is slower than the right. The right cortex processes the information much faster, but in a global, less detailed manner. There is exchange of information between the sides, although this exchange can be both excitatory and inhibitory. From a developmental perspective, there is initially only very limited information exchange between lobes within each side, and between the hemispheres. This allows each cortical area to fully develop its memories and associated processing prior to influence from more distal areas. Additionally, left hemisphere functions (e.g., receptive and expressive speech) will develop more slowly than those of the right hemisphere (e.g., non-verbal emotional analyses and responses), since there are a greater number of cortical columns and interconnections associated with left hemisphere processing. A final point is that the right hemisphere's global processing allows for faster responses if confronted with outside danger, which suggests that this side is biologically programmed to respond and assume behavioral control in a negative emotional state.

The left cortex primarily handles language functions, since these involve a high level of detail. Thus, the left posterior areas are involved in understanding (with associated memory storage) both spoken and written language, while the left frontal lobe controls spoken language, including the motor memories of language. Thus, thinking verbally is a left cortical process involving the frontal lobe and has been called the "verbal interpreter" (Moss, 2013). In contrast, the right cortex is involved in many less detailed, global functions, including non-verbal emotional analyses and responses. The right posterior areas are involved in understanding (with associated memory storage) non-detailed emotional behaviors shown by others, as well as in the storage of external (e.g., sight, sound) and internal (e.g., visceral responses) sensory memories connected with emotions. The right frontal lobe is involved in emotional expressions involving prosody and body language, including the motor memories of such expressions.

In reference to potential treatment foci, the clinical biopsychological model describes three areas: verbal-thinking, emotional-thinking, and interhemispheric congruence. Interhemispheric congruence refers to the ability to verbally label with accuracy all ongoing emotional states, and to have consistency in thoughts and feelings with regard to internal states and external stimuli. An example of healthy interhemispheric congruence is when an individual in a negative emotional state identifies and perceives the emotion as reasonable from a verbal-thinking standpoint. In such a case, the individual would be in the negative state, but have an absence of inner conflict/turmoil.

Finally, the CBM suggests three different ways depressive patterns can occur. They may arise from: (a)

an ongoing situation (e.g., argument, environmental danger), (b) the stimulation of negative emotional memories (e.g., trauma, problematic relationship memories), and/or (c) the failure to activate positive emotional memories (e.g., in the case of loss of desired relationship, loss of job). A thorough discussion of research supporting the CBM and its clinical applications dealing with negative emotional memories can be found in Moss (2007, 2013). The focus of the current paper is to provide a much more detailed discussion on loss and the failure to activate previously stored positive memories than has previously been presented (Moss, 2013).

Opponent-Process Theory

The concept of opponent-process was first discussed in relation to color vision (Hurvich & Jameson, 1957). It was first applied to motivational states related to addiction by Solomon and Corbit in 1973, with further elaboration related to other acquired motives introduced a year later (Solomon & Corbit, 1974). The basic concept is simple: With the onset of an affective state (whether positive or negative) tied to a stimulus, there is an opponent affective "slave" state that very gradually activates. With repeated presentation of the stimulus, the opponent affective state grows in its intensity. The result is that the perceived level of the original emotional state is reduced over time. In other words, the opponent- process offsets the original state, similar to adding together positive and negative numbers with the sum always tending toward zero. The larger the number of exposures and duration of the stimulus, the more extreme the opponent affective state will be if the stimulus is gone. However, there will be a deactivation of the opponent state over time provided the stimulus is not reinstated.

Solomon (1980) proposed the biological significance of such a process is that there are both psychological and physical costs of affective states. A reduction in affect would therefore reduce these costs. Moss (2001, 2013) has further suggested that such a process is important for survival in a different way: It prevents the organism from finding anything in the environment that leads to a continuous highly positive or negative state that would interfere with the organism continuing to engage its environment. Obviously, meeting all biological needs required for survival requires engaging with the environment.

In his 1980 article, Solomon commented on the success of the theory in predicting experimental outcomes. He noted that every experiment generated by the model had failed to refute it. He mentioned its potential applications in additional areas, such as social philosophy and psychosomatic medicine. In spite of this, there remains to date a paucity of studies relating opponent-process theory to psychological problems other than addictions.

Loss and Depression

If one applies the opponent-process theory to clients' experience of loss in relation to desired situations, the occurrence of depressive symptoms in such cases finds a simple explanation. Moreover, the longer the duration and the greater the initial intensity of the positive affective state associated with the desired situation, the greater the intensity and duration the depressive symptoms will be. For example, taking a week-long vacation that is very enjoyable leads to a mild sadness when it is finished, whereas the ending of a marriage of 20 years that was primarily positive results in much more severe despondency. Despite the simplicity of this concept, it seems to have eluded many professionals engaged in the treatment of depression, in which loss is a major component. A number of factors likely contribute to this lack of recognition.

A primary reason is that trying to eliminate the undesirable emotional state regardless of its cause has become the major goal for many treating professionals. While prescribing medication is the most common example of this, all too often it appears that non-physician therapists lack an effective conceptual model for use in the assessment and treatment of clients.

Obviously, loss is not the only factor leading to depression. As previously mentioned, both negative emotional memories and current situational factors may also be involved. Of these, it is current factors that seem to become the focus of treatment most often. This is likely a result of the clinician being unable to reinstate losses or do much directly in relation to the negative emotional memories.

Another reason opponent-process theory may have been overlooked in this area is that losses experienced by a client may not initially be viewed as permanent, so that little or no temporal association is perceived between the loss and depressive symptoms. For example, developing physical limitations due to injury or illness often results in immediate losses which are viewed as temporary in nature. The hope is that effective treatment will eliminate the physical problems. However, this is often not the case, and the condition

becomes permanent. Applying the opponent-process concept to this example, the depressive symptoms associated with the reality of not being able to engage in activities are initially offset by the cognitive expectation that there is no complete and permanent loss. A relatively mild dysphoric state would be expected at the time under such circumstances. If the client finally reaches the point of accepting the permanency of the condition, a much more severe depressive state will occur. Also, in the same way that expectations can influence the opponent-process in the face of conflicting reality, the absence of a real loss can influence the opponent-process even when loss is anticipated. An example of this can be seen in a person dealing with the anticipated death of a close family member. "Anticipatory grief" is much milder than and does not offset the severe grief experienced once the loved one dies.

If this understanding is correct, it is to be predicted that an individual who is told from the outset there is no hope of recovery from a non-life threatening physical condition should "grieve" the loss much faster than someone who is told the condition is likely temporary. Opponent-process theory would predict that several months after the event, an individual who has experienced permanent loss would be less despondent than someone who had anticipated the condition to be temporary. This is due to the negative opponent-process weakening for the "permanent," but not the "temporary," individual. In study results consistent with this prediction, Smith, Loewenstein, Jankovic, and Ubel (2009) found that six months after being released from hospital for colostomies, overall quality of life and life satisfaction were better for irreversible versus reversible colostomy patients. They suggested that knowing an adverse situation is temporary can interfere with adaptation, leading to the paradoxical situation where people who are better off objectively are worse off subjectively.

Another factor affecting the perception of a temporal association between loss and depressive symptoms is that losses seldom occur in isolation or simultaneously. Major life changes can lead to a number of losses "down the road." For instance, an individual experiences an event leading to posttraumatic stress disorder (PTSD). The PTSD symptoms interfere with that person being able to comfortably resume normal activities. With the loss of those normal activities, opponent-process theory would predict depressive symptoms to occur. The failure to continue normal activities may result in the loss of social contacts, job, home, etc. With each realized loss, there would be a worsening of depressive symptoms associated with that loss. In an example of a primary condition leading to a different kind of loss, Kirchner and Lara (2011) found that loss of social functioning was more influential in terms of depression than loss of physical functioning, in 65 multiple sclerosis patients.

A final factor is that some losses occur as a natural corollary of what others consider positive life events or changes, and may therefore go unnoted at the time. For instance, accepting a new, desired job results in losing former relationships. Even accomplishing a major goal, such as an educational degree, results in the goal being lost, and some despondency is likely to occur. In a longitudinal study (Nicholson, 1999) of postpartum depression, 24 women were interviewed at one, three, and six months after the birth. The findings were described as paradoxical in that the women were happy to be mothers, but unhappy with the losses that early motherhood inflicted upon their lives. There were losses of autonomy and time, appearance, femininity and sexuality, and occupational identity. The author suggested that if the losses were taken seriously and the women were encouraged to grieve the losses, the women and their social support network could view this as a potentially healthy process as opposed to a pathological response to a "happy event." This suggestion is consistent with the discussion of treatment implications that proceeds in the next section.

One further consideration should be noted. In the case of a primarily negative situation, the end of that situation would be expected to lead to a positive affective opponent-process. Yet while not leading directly to depressive symptoms, the failure to experience grief in certain situations in which others believe it should be experienced can lead to feelings of guilt. Such guilt can then contribute to increased depression. An example is when a relationship with a parent or spouse that was primarily very negative ends due to that individual's death, opponent-process theory predicts positive feelings such as relief and/or happiness. A client who understands that such a reaction is normal as opposed to pathological may well avoid the additional distress of guilt and anxiety.

Treatment Implications

The first recommended step in treating loss-related depression is education. The client should be presented, either verbally or with the aid of graphics, a brief explanation of the rationale of the opponent-process theory, in which a positive emotion occurs in connection with a particular situation or relationship together with a gradually increasing opponent negative

emotion. For example, the initial ecstasy of falling in love will, over the years of a healthy marriage, transform into a less extreme feeling of contentment. It is explained that the positive emotion remains constant, but the opponent negative emotion gets stronger, subtracting from the positive. If the marriage ends, the positive emotion is lost, with only the opponent negative emotion remaining. It is further explained that if the loss is accepted as permanent, the negative opponent emotion will gradually deactivate over time. This suggests to clients that their current depression is a normal reaction to the loss while simultaneously suggesting improvement in the future (the interested reader will find a detailed discussion of how to educate clients in the Appendix).Another point that needs to be related concerns the expected course of loss-related depressive symptoms. For those clients with physical problems which will progressively worsen, or for those who are expected to sustain additional losses (e.g., bankruptcy due to inability to work), it is important to convey that acceptance can only be obtained in relation to those aspects already lost. Such clients should be given the expectation that increased depressive symptoms are expected with any additional losses.

A further recommended component of education is that the client be told what the actual emotional experience will be like during the gradual deactivation of the opponent-process emotion. A client may take the position that allowing himself or herself to experience depression is like an admission of defeat. The loss of motivation that normally accompanies depression may thus be interpreted as giving up on life, prompting anxious attempts at resistance. For this reason it is critical that the client comprehend the overall emotional reactions that occur in each of us when we deal with significant losses. Such an understanding will effectively reduce anxiety levels, since the negative emotional experience will be perceived as normal and expected. Consistent with mindfulness and acceptance views, this results in less judgment of negative emotional reactions as "bad" and greater tolerance of depressive symptoms.

Even when experiencing only one significant loss, it is important for the client to realize that one does not go through the various stages of the grief process in a smooth and uniform manner. For while the overarching pattern and trend of emotions follows the described phases, emotions perceived on an hour-to-hour and day-to-day basis may seem more erratic.

An important role for therapists is in assisting clients to determine whether losses are truly permanent. As already pointed out, accepting the reality of a loss being permanent is crucial in allowing the client to get on with the grieving process and adapt to the loss. Although important, assisting clients in this area may prove difficult for therapists since it is not always evident whether losses are permanent. Obviously it is the client who must reach any such conclusion and the therapist should not force the issue. The therapist's role is to help the client sort through the facts, being realistic about the probability versus possibility of the loss being reversed.

A final point is that the therapist may assist the client in fostering a different kind of hope than that of reinstating the loss. This may involve viewing the loss as closing a chapter in one's life, but starting a new one based on what capacities remain. For example, a client who is spiritually oriented may come to view losses as an opportunity to grow in this regard. Those familiar with a constructivist view know the value of assisting the client in constructing meaning in response to life events.

Theoretical Considerations

The theory of depression that most closely aligns with the opponent-process view canvassed here is the loss of reinforcing activities proposed by Lewinsohn (1974). This is a behavioral conceptualization of depression in which a low rate of response-contingent positive reinforcement (RCPR) causes and maintains depression. Lewinsohn suggested that lower-level antecedents to a low RCPR included skill deficiencies (e.g., in social skills) that limit the elicitation of environmental rewards, an individual's lack of capacity to enjoy potentially rewarding events, and an environment lacking desirable reinforcers. This last aspect was considered to be the result of personal loss, socioeconomic restrictions, and/or significant life changes (Lewinsohn, 1974).

The current opponent-process theory of loss-related depression differs in several respects from this theory. Whereas the Lewinsohn theory views the lack of RCPR as the cause of depression, the current theory does not. In fact, an opponent-process conceptualization provides an explanation of the exact cause of Lewinsohn's proposed deficiency in enjoying rewards. It suggests that the inability to experience positive reactions to previously reinforcing activities is the result of the pervasive impact of a strong negative opponent-process emotion. This is viewed not as a deficiency of the individual; rather, it is a naturally occurring reaction to significant loss. Moreover, the current

theory views the internal opponent-process affective state as the cause of depressive symptoms, rather than a lack of available reinforcement. For example, the loss of a significant relationship may not limit the client's access to movies, parties, video games, etc., yet the client finds reduced interest and enjoyment in these. As a result, the client may discontinue these for a period of time.

With regard to the neurophysiological causes of an opponent-process, there can only be speculation. The clinical biopsychological viewpoint as explained by Moss (2001) is that the positive emotional memories of the lost stimulus housed in the right posterior cortex can no longer be activated, resulting in the opponent-process affect. This implies that positive emotional cortical memories are initially formed due to the reinforcing aspects of the stimulus. The actual positive emotion is the result of subcortical activation, probably involving the septal and amygdala regions and/or the mesolimbic dopaminergic system with cell bodies in the ventral tegmental area.

It is likely that the interactions of the amygdalae and septal regions (either unilaterally or bilaterally) are related to the opponent-process (see Grossberg & Schmajuk, 1987). Similarly, the ventral tegmental area has connections with the amygdala and nucleus accumbens. Hollerman & Schultz (1998) observed that dopamine appears to signal whether reward exceeds or falls short of expectations. Unexpected reward leads to a strong dopamine signal in the ventral tegmental area. With repeated reward presentation, the signal decreases. Conversely, non-appearance of an expected reward leads to a reduced dopamine signal. Although these findings were interpreted to mean that expectancy is the factor leading to increased and decreased signaling, an alternative interpretation is that these phenomena are the result (or possibly partial cause) of the affective opponent-process. Mink (2008) notes that the ventral striatum receives input from the limbic and olfactory areas of the cortex, including the amygdala and hippocampus. The ventral striatum (including the nucleus accumbens) has reciprocal connections with the ventral tegmental area (part of the mesolimbic dopamine pathway). The ventral pallidum receives input from the ventral striatum and amygdala, with its output going to the dorsomedial nucleus of the thalamus, which projects back to the limbic cortex. The exact nature of the role of the overall system in emotion is not known, although Mink suggests that the inhibitory output of the ventral pallidum may act to suppress or select potentially competing limbic mechanisms. Suppression and selection of competing limbic mechanisms are certainly functions consistent with an opponent-process.

Overall, although the neural factors cannot be specified, there does appear to be sufficient evidence for the validity of the opponent-process theory of emotions. To conclude, the current paper has emphasized the relevance of this theory in the development of loss-related depression, including how it relates to psychotherapy. It is hoped that this elaboration will lead to the further interest of clinicians in the clinical biopsychological approach. It is also to be hoped that the brief exploration of the broader potential of opponent-process theory presented here will motivate further applied research into this brain-based approach to psychotherapy.

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Appendix

Educating the Client With Regard to Loss-Related Depression (from Moss, 2001)

A major source of depressive symptoms is tied to the inability to activate previously stored positive emotional memories. This is created by experiencing loss in one's life in some form or fashion. This loss may involve relationships, material things, goals, and/or beliefs.

Regardless of the source, the basic patterns of these grief reactions are consistent. I believe the most severe form of this grief reaction occurs when one is confronted with reality that conflicts with basic beliefs. However, life experiences that lead to the loss of basic beliefs typically require other multiple losses involving relationships, material things and goals. Thus, the overall process may take years of an individual experiencing multiple grief processes tied to each individual loss. I believe it is important for both therapist and client to be aware of these facts. In explanation, once the client understands the normal grieving process, there is often the misperception that one will move smoothly through the various "phases" and reach the level of acceptance within several months. However, with additional losses there will be additional grief reactions and this can be one factor contributing to many of the recurrent depressive episodes over a period of years. Of key importance is the client's realization that he is going through the normal emotional processes tied to losses.

A frequently observed example of the loss of a basic belief relates to one's ability to control situations. This belief may be characterized by the statement, "If I work hard enough at something, I should be able to control it." Obviously, clients encounter any number of situations which cannot be controlled by their efforts and this can eventually lead to their acceptance that they are not in control. If this reality based belief is emotionally accepted, there will be a worsening of the grief reaction independent of any additional losses.

An additional important distinction is between what has been called "anticipatory" versus actual grief. Anticipatory grief means the loss has not yet occurred, or it is uncertain whether the loss that has occurred will be permanent in nature. This time can be difficult

emotionally since the client is in a holding pattern, being in limbo. During this time it is not possible to make plans for the future because of the uncertainties. The overall impact is there is a low grade depression characterized mainly by dysphoric mood. This is the reason that many, if not most, clients assume they have already been experiencing a grieving state given they have had the dysphoria during the time they are anticipating the loss. They are then shocked when the loss is actually "emotionally" accepted as real because of the more extreme nature of the negative emotions. In other words, when it is truly accepted that something once very positive is actually lost with no hope of recovery, there will be severe distress experienced almost immediately.

Often a client finds himself in a position where he feels that allowing himself to experience depression is like an admission of defeat. The client may believe the experience of losing motivation that accompanies depression means he has given up on life and will never function again if he does not actively fight against it. This is the reason it is critical that the client comprehend the overall emotional reactions that happen to each of us when we deal with significant losses. With such an understanding, there can be much less anxiety experienced by the client since the negative emotional experience can be perceived as normal and expected.

Even when the client is experiencing only one significant loss, it is important for the client to realize that one does not go through the various stages of the grief process in a smooth and uniform manner. Instead, these emotional changes are experienced in a way that the predominant pattern and trend of emotions follows the described phases, though the hour-to-hour and day-to-day perceived emotions may seem more erratic. The following description of the stages serves as the basic information the current author recommends sharing with the client.

Denial - This stage is marked by the fact that emotional the loss has not been accepted by the right cortical hemisphere. In other words, the loss has not emotionally "sank in." More of an emotional numbness may be experienced at this time. Although the client may be able to express verbally from the left hemisphere that he is aware that a loss has occurred, this statement is made without any strong negative emotions. The denial phase can last for days to weeks in individuals having a known permanent loss.

Sadness, grief, and emotional pain - Following the emotional denial of a loss, one usually feels sad, blue and melancholy. I believe this is the time the right hemisphere "feels" the loss due to confronting environmental situations which confirm the loss. For most people these feelings are also accompanied by a number of other changes. There is often a change in sleeping patterns, such that one individual may sleep very little while another may sleep excessively. Appetite changes are common, such that some eat much more and others may lose the desire to eat. Energy level drops such that getting out of bed in the morning may be a major task. Individuals at this time may feel little to no motivation to do things, and find themselves having to push to accomplish what may have in the past been considered a minor task. Therefore, during this time the accomplishment of such "minor" things should be regarded by both therapist and client as major achievement. Additional difficulties include crying spells or feeling like crying. In fact, during true grieving the crying comes from a very deep level that can best be described as sobbing. Most people find that crying in this manner is cleansing despite the fact that the negative emotions continue. Crying spells may be associated with specific incidents, although they frequently occur when there is nothing that seems to have happened. Feelings of enjoyment in activities decreases, with some clients going through the most extreme grief find no enjoyment at all. The client often perceives that he is simply "going through the motions" in his activities. Individuals often lose interest in sexual activities.

A particular difficulty during these times involves death thoughts. Although these are usually transient in nature, they do cause a great deal of concern for the individual and those around them. Feeling like, "If life is going to feel this way, I would prefer not to exist" is common. People often find themselves crying out to God to please remove them from the world. An individual going through such deep grief often feels the pain is too great a problem with which to deal. (Obviously, the therapist should stay aware of any true intentions of suicide and plans to kill oneself since this may be perceived by a few clients as the only way to escape. However, it is assumed that any therapist reading this book should be competent in this area of assessment and the ways to address such problems.)

During this time one of the most distressing aspects is the feeling of isolation/loneliness, as if no one can understand the degree of emotional pain that is being experienced. Once this is voiced to the client, he should be told that the pain is not endless or bottomless, although at times it seems this way. The pain does have its limits. The client will at times find it important to be alone with the emotional pain. The client can be reminded that we were never designed to experience negative emotions that cannot be survived

and that the pain will eventually end. The pain will come in an ebb and flow pattern. Therefore, whenever it is there, the client can allow himself to deal with it. When it is absent, the client should feel no obligation to pull it back up. He is simply allowing himself to experience the various emotions as he goes through the patterns.

Although the client is generally miserable at this time, there are things that can be done to manage better the sadness and grief. Foremost is that the client be nice to himself. He should be made aware that just spending time pampering himself is quite justifiable. Although engaging in previously enjoyable activities may only represent a distraction at this time, the client can still be encouraged to do these things. This is based upon the fact that he is going a time based process and nothing can be done to speed up the grieving process. Thus, distraction can be healthy and give a brief respite from the emotional pain. Above all, the client needs to be encouraged to refrain from attacking himself by being critical. Individuals should be made aware that they need their own love and support during this time.

Clients often state that many times they experience anxiety and deep feelings of emptiness, and they wish to get out and do things in an attempt to reduce these feelings. However, upon going out they usually find they are still miserable. Simply put, people going through a grief reaction find themselves miserable wherever they go. Therefore, it is wise to have the client maintain a regular and reasonable schedule at this time. Often there will be little enjoyment in maintaining this schedule and one feels he is simply going through the motions. Although these things do not necessarily feel enjoyable to do, maintaining a reasonable schedule is one of the best ways to keep oneself moving ahead. I often express this to the client that he is going to feel miserable and his only choice is whether he accomplishes something by the end of the day or accomplishes nothing. Most people find it desirable to accomplish something since the emotional state will remain the same no matter what.

During this time the client should be encouraged to watch nutrition and rest. Eating a balanced diet and insuring that there are adequate periods of sleep are important. The client should be encouraged to avoid doing things in excess, with moderation being the key. The client should be encouraged to avoid substances such as alcohol during this time. Alcohol may seemingly make the client feel better on the short run, but can create additional problems and actually intensify unnecessarily the depression. Although one may not have had difficulty in alcohol use in the past, during this time the depressant effects of alcohol can worsen the emotional reactions to loss or lead to unhealthy impulsive behaviors.

Anger - Having anger toward loss is common. The increase in anger will usually occur following an extended period of sadness and grief. The client needs to be aware that the anger and rage feelings accompanying the grief process are qualitatively different from the irritability that is experienced throughout the sadness phase. The irritability is better explained as ones inability to deal with additional stressors since the individual is already dealing with the major effects of significant loss. In other words, irritability reflects one's inability to cope with additional stimulation from external sources. However, the anger and rage feelings experienced in this stage are much more intense and are not necessarily tied to any identifiable external factor.

The emergence of the anger and rage should be viewed by the therapist as a positive sign for the client. In explanation, this indicates the client is progressing through the grief process and suggests there will be only a few more months before the level of acceptance is reached.

The client will experience variations in the depression and anger feelings such that the anger feelings will increase in duration and frequency. This will follow the pattern in which the dysphoric mood will be much milder than that originally experienced and will be interspersed with the increasing anger. During the times of anger, the client can be made aware that it is appropriate to separate himself from others, particularly if the anger is intense. I often suggest the client go to a room alone and talk aloud about the loss, even to the point of screaming, if desired. The client may do things like beating a pillow or other appropriate object, with this sometimes leading to a release and improvement in overall feelings. In fact, the only time I see such behaviors prove to be of benefit is during the acute anger tied to grief. I have seen similar suggestions made to clients as a means of dealing with harbored resentment toward significant others, though the current author has never seen this lead to any meaningful reduction of resentment.

The client can be made aware that during the time he is experiencing negative emotions, it is important to give others permission not to fix him. Many times the people closest to the client see the negative emotional reactions and feel the need to provide some suggestions in hopes of stopping the client's pain. Unfortunately, this often leads to these individuals giving

advice to the client, such as, "Why do you put yourself through this?" or "Think about the good things you have and it could be worse." Although these friends and family members may seem to have the best of intentions and may be trying to help, such comments tend to make the client feel worse. The client usually feels he is being told to quit feeling sorry for himself and is bringing others down as well. In this regard, recommend to the client that he let the people around him know that he will assume responsibility for telling them what they can do, if anything. The client can further state that the best thing his friends and family can do is to just be there and let him feel comfortable in expressing whatever the feelings may be at the moment, even if it involves crying. The client can tell them that their advice is seen as good intentions, but he has no choice but to have the negative feelings as they occur. Importantly, the client should say to these significant others that he will improve over time and it simply takes time to heal. The best time for the client to relate this information to those around him is when he is not experiencing extreme negative emotions and when he appears to be in total control.

Acceptance - Over a period of time, usually many months for major losses and even years for multiple sequential losses, a person finds much more internal calmness and peace. There is an acceptance that the loss has occurred, but there are many other things in life that remain or will be new. The client will once again be experiencing positive emotions on a more regular basis, with a feeling of increased internal strength in association with putting things into perspective. The client will tend to view himself as being able to face future possible losses with the knowledge that he can cope with whatever happens.

In the present day when both professionals and lay individuals have been lead to believe there should be a cure for everything, I believe many therapists have either not been trained or have lost sight of the fact that extreme negative emotions do occur and are part of a normal pattern. I have observed many instances where people going through unrecognized grief reactions were placed on medications to reduce the depression only to find that it had little impact. Over the period of many months and numerous medication changes, the person slowly improved, returning to more neutral levels of emotions. I believe it is often erroneously assumed that the "right" medication combination has been reached without the realization that the individual would have demonstrated this same pattern of improvement in association with a normal grieving process, finally reaching the level of acceptance.

There is some similarity to the problem of prescription antibiotics being given to patients for whom it will have no beneficial effects other than to make the patient feel something is being done to treat his illness. Such practices are now criticized since resistance to antibiotics has developed at an alarming pace as a result. In relation to antidepressants, the client, doctor and those close to the client want some visible sign that the perceived problem is being treated. Over time and with eventual improvement, it is often believed by the client that he must maintain these for the rest of his life to manage a chemical imbalance. If additional grief reactions occur, it is then assumed that the medication has lost its effectiveness and a new or additional medication is required, each with its own side effects. There appears to be a lack of understanding that there is no medication that can remove such grief reactions since these are normal and natural, and these must run their course.

I do not wish to communicate that I am against the use of psychotropic medications. I am advocating that they should be used in conjunction with appropriate information being given to the client. For example, if a person clearly understands normal emotional reactions tied to losses and other sources of negative emotions, there is the realization that specific psychotherapeutic procedures may be appropriate or that time will heal. In this case, the client sees the medication as something to be used for whatever symptomatic relief it provides, but also expect it to have only limited benefit. Once improved, hopefully the client will not have the fear that discontinuing the medication will necessarily result in a return of problems. In closing, I believe it is important that people be aware that negative emotions do exist for all human beings and the more understanding we have, the more capable we are of accepting the normal variations in both positive and negative emotions with realistic expectations.