Ascap, October, 1997, p 8-11

Goal Setting in Psychotherapy: A Contribution from Evolutionary Biology

"Please give me the strength to change what can be changed
And the patience to accept what cannot be changed
And the wisdom to tell the difference."

This is the chosen prayer of Alcoholics Anonymous, and, even apart from alcoholics, much of psychotherapy is devoted to helping patients with the components of this prayer. If there are no goals, there is no motivation. If goals are too high, there is failure. The process of achieving a goal which is seen as worth while and not easy to achieve, but not impossible, gives satisfaction and mental health. No controlled study has proved this, but common sense tells us that it is so.

Edward Bibring (1953) was the first to emphasise that depressed patients can often be seen to be clinging on to unachievable goals. Klinger (1975) suggested that the biological function of depression is to detach people from unreachable goals. This view has recently been repeated by Champion and Power (1995). The unachievable goal is sometimes a representation of the ideal self, which may deviate so far from the real self that the resulting "credibility gap" is a source of stress. And so psychotherapy addresses itself to making the ideal self more realistic (Moretti et al., 1990). In more behavioural terms, the object is to narrow the gap between aspiration and performance.

Our evolutionary approach can clarify the relationship between unachievable goals and mood change. To achieve this we need two concepts: the escalation/de-escalation strategy set (Archer and Huntingford, 1994) and Paul MacLean's concept of the triune brain (MacLean, 1990, 1994).

Depressed mood is a de-escalating strategy

A common quandary of man and his ancestors has been the imminent collapse of an enterprise, in which the resources already invested seem not only insufficient to complete the task but are themselves in jeopardy of being lost. In such a situation it has to be decided whether to invest more resources in the expectation of final success, or to cut one's losses and try to rescue whatever can be salvaged from the failure. These two strategies, which are conveniently called escalation and de-escalation (Archer and Huntingford, 1994), are part of the inherited repertory of man, and come into the category of archetypes (Stevens and Price, 1996), evolved mechanisms (Buss, 1995) or fixed (modal) action patterns (Eibl-Eibesfeldt, 1975), depending on one's discipline. We have proposed that the capacity for mood variation evolved in the context of this strategy set, elevation of mood being related to escalation and depressed mood to de-escalation (Stevens and Price, 1996).

Depressed mood is a lower level de-escalating strategy

Paul MacLean (1985, 1990) showed that the brain is not a single unit but has a three-level or triune structure. There is the lower level "reptilian brain" which occupies the corpus striatum; the middle level "paleomammalian brain" which is based in the limbic system; and the higher level "neomammalian brain" which is represented by the neocortex. Each brain contains its own "central processing assembly" or decision-making process for dealing with changes in the environment. For instance, in response to cold, the lower level may decide to shiver while the higher level may decide to switch on the central heating. Clearly, the decisions at the various levels interact, in that turning on the central heating may either pre-empt or terminate shivering. In fact, if we were in the position of "treating" shivering, we might ask: "Why has this person not turned on the central heating?", rather than apply our remedies to the fasciculating muscles themselves.

In the face of social adversity, the higher, neocortical level makes what we would call a conscious or rational decision to escalate or de-escalate. Higher level escalation strategies involve "sticking to one's guns", deciding to "take the matter further" or even to go to "the highest court in the land"; higher level de-escalation strategies take the form of either acceptance/submission or escape/withdrawal. At the middle or limbic level the strategy is manifested by emotion; escalation is characterised by anger or indignation; de-escalation is manifested by depressed or dysphoric emotion, which may take the form of shame, humiliation, guilt, fear or the sense of being chastened. In the lower or reptilian brain the strategy choice is between elevated mood and depressed mood. Elevated mood provides the basic resources for escalation such as energy, confidence, optimism and rapid decision-making capacity. Depressed mood blocks escalation by taking away these resources, and it also alters thinking and feeling in such a way that a higher level de-escalation strategy is more likely to be adopted.

Depressed mood can be conceptualised as the downgrading of three important biological

variables: resource-holding potential, which is an estimate of fighting ability and is probably the primordium of human self-esteem; resource value, which is an estimate of the importance of whatever is being fought over; and entitlement, which reflects the state of ownership as opposed the that of being an intruder on someone else's territory (Krebs and Davies, 1993; Archer and Huntingford, 1994; Hack, 1997). The lowering of these three variables affects the climate of thinking in the higher brain, inclining it towards de-escalation. The drop in resource-holding potential favours an evaluation of not being able to succeed, the low resource value reduces the desire to succeed, and the low sense of entitlement gives the idea that the individual does not deserve to succeed. Thus, even if at the outset of the decision-making process, an escalating strategy is adopted at the higher level and a de-escalating strategy at the lower level, the influence of the lower brain on the higher brain is likely to induce the latter to switch to a de-escalating strategy. As a result, in the normal course of events, there will be a co-ordinated, triune, de-escalating strategy, and the effect of this is likely to be to resolve the conflict and to exit from the social adversity. Then, its work completed, the lower level de-escalating strategy may remit. If, however, for any reason, the "depressive" influence on the higher brain does not succeed in getting it to switch to de-escalation, the individual finds himself adopting incompatible strategies at the different levels, and, in particular, the reduction in resources due to the lower-level de-escalation prevents the successful prosecution of the higher level escalation strategy and he is caught in a chronic losing situation: the lower level de-escalating strategy becomes both intense and prolonged, and it is then that it is recognised as "illness" and given the label of depressive state.

Causes of strategy mismatch

According to our model, the cause of depressive illness is not social adversity, or losing, or failing, because it is normal for human beings to lose and fail and to be confronted with adversity. Rather, the cause of depressive illness is the failure of the triune brain to coordinate its response to social adversity. A co-ordinated response ensures either success or successful withdrawal\submission. Often one finds that higher level de-escalation is being blocked for some reason, either in the patient or by a third party. For instance:

1. Higher level de-escalation is blocked by moral scruples.

When someone tries to maintain an impossible position, or clings on to an unrealisable goal, we call it courage or stubbornness, depending on whether or not we sympathise with the attempt. Pride, honour and moral scruples are all reasons for continuing to escalate at the higher level in spite of crippling de-escalation at the lower level. Milton took on the monarchy, Darwin took on the church, and many are the martyrs who have refused to bend the knee. Health is sacrificed to principles. We have described a case in which the patient refused to join his work colleagues in dishonesty, was punished by them and suffered depressive illness as a result (Stevens and Price, 1996, pp. 222-226). Anthony Trollope provides a paradigm of self-destructive stubbornness in his novel He Knew He Was Right. In such a case the therapist is in the position of the medical attendant of a boxer who insists on fighting more powerful opponents.

In other cases, the unrealistic aspiration may be to carry on life normally in spite of illness or disability. Here the doctor needs to make clear to the patient what should and should not be attempted. In the case of the depressed patient who is working longer and longer hours in an attempt to compensate for depressive slowness and lack of concentration, it is useful to use the analogy of a broken limb, and to say that the mind should be in a plaster cast until it is time to start a gradual rehabilitation.

2. Higher level de-escalation blocked by ignorance or misunderstanding.

Human submission (unlike animal submission) involves obedience, or actively doing what the other person wants. Sometimes this is impossible. A dominant husband may insist on an enthusiastic sexual response, a dominant wife may require that her husband give up an involuntary tic. Sometimes the patient does not know what to do to please the other: a husband did not want his wife to work because he was afraid she would meet attractive men, but he was ashamed to confess this fear, and so he criticised her for laziness and stupidity until her depression made her unfit for work.

3. Higher level de-escalation blocked by a third party.

A wife wanted to please her husband, who insisted that she be at home on Saturday ; but her mother, who was even more powerful than her husband, insisted that she visit and do chores

for her on Saturday. Submission to one involved resistance to the other. She wanted to de-escalate in the two most important relationships in her life, but she was not allowed to. In this case the depressive illness remitted when her mother died.

4. Sometimes the patient wishes to escape from an intolerable situation but cannot do so. Extreme cases are represented by hostages and torture victims, but minor domestic forms occur in the school playground, the prison cell and even in the nuclear family. An emotionally battered wife may be unable to leave because of fear, or because of love for a child.

5. Middle level de-escalation blocked by a sense of injustice.

Many patients suffer insults and wrongs which they cannot let go because of resentment or anger over the injustice of it all. Recent cases of this kind in my clinic include people sacked unfairly from their jobs, a father accused of sexually assaulting his daughter, and parents who feel the education authority has failed their children in some way. These people feel beside themselves with anger, seething with murderous rage (Gilbert, 1997). Even if they choose to de-escalate at the higher level, they are still escalating at the middle level of emotional reaction, and this prevents the resolution of the lower-level de-escalation.

Identifying the conflict

At the higher level, there are many areas of life in which escalating and de-escalating strategies are carried out independently; for instance, one may be escalating one's love life by pursuing an affair, while de-escalating one's parental relationship by agreeing to give up smoking. At the middle level of emotional response, there is still some variety, in that one can be depressed about one issue at the same time as being angry about another - one can even be angry and depressed about the same issue. But at the lower level, the strategy is unfocused; it is an all or nothing matter, and affects all activities and strategies. Depressive mood is pervasive. How does one decide which of the higher level escalations is producing a situation which is causing this lower level de-escalation? This is one of the skills of the psychotherapist. Suffice it to say that it usually concerns one of the patient's salient goals or relationships. The connection between the blocked goal and the depression is often not apparent to either the patient or to those close to the patient.

Alternative strategies

for dealing with social adversity

Brain level	ESCALATING	DE-ESCALATING
HIGHER LEVEL (neocortical)	Conscious decision to fight to win or pursue goal	Conscious decision to give up, submit or

escape

MIDDLE LEVEL Be: angry Be: chastened
indignant put down
(limbic) envious humiliated
resentful (depressed emotion)

LOWER LEVEL Increase of energy Reduction of and
confidence energy and confidence (striatal) (elevated mood) (depressed
mood)

TABLE 1. Strategies to deal with social challenge or adversity: escalating and de-escalating strategies at the three levels of the triune brain (neocortical, limbic and striatal). From Stevens and Price (1996). Striatal de-escalation plus limbic escalation = the hostile depressive. Striatal de-escalation plus neocortical escalation = Edward Bibring's (1953) depressives who cannot give up unrealisable goals. Striatal escalation plus limbic de-escalation may give a mixed affective state (Swann et al., 1993).

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