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Cognitive Appraisal and Reappraisal: Implications for Clinical Practice

Jeremy D. Safran[1] **and Leslie S. Greenberg**
The University of British Columbia

A central step in many cognitive approaches to therapy consists of helping the client to become aware of maladaptive cognitions. In practice this process is often a complicated one requiring considerable therapeutic skill to implement. The present paper utilizes Arnold's (1960, 1970) cognitive appraisal model in order to clarify the nature of and reasons for some of these problems. In light of this clarification, specific recommendations for the refinement of clinical procedures are made.

Cognitive behavioral theory has held that there is a strong relationship between cognitions and affective states and that, moreover, cognitions causally influence emotions (Mahoney, 1974). Recent studies, however (LaPointe & Harrell, 1978; Sutton-Simon & Goldfried, 1979), have challenged this simple picture. These findings raise questions as to the accuracy of traditional cognitive behavioral theorizing that maintains that emotions arise as a direct result of mediating cognitions.

In general, the empirical evidence suggests that while negative self-statements are associated with psychological distress and maladaptive behavior, there is no clear-cut relationship between positive self-statements and psychological adjustment (Kendall, Williams, Pechacek, Graham, Shisslak, & Herzoff, 1979; Cacioppo, Glass, & Merluzzi, 1979; Craighead, Kimball, & Rehak, 1979). In a recent study, Safran (in press) found that unassertive subjects who employed a high frequency of positive self-statements were actually rated by judges as more irritable and brusque than subjects who reported a low frequency of positive self-statements.

[1]Address all correspondence to Jeremy D. Safran, now at Department of Psychology, Workers' Compensation Board, 6951 Westminster Highway, Vancouver, British Columbia, Canada V7C 1C6.

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These findings, while confusing when viewed from a traditional cognitive behavioral perspective, are consistent with our clinical observation that clients often spontaneously employ coping-statement strategies prior to therapeutic intervention. As evidenced by the fact that these clients still seek help from the therapist, however, the coping statements they employ are not necessarily effective and, moreover, can sometimes be symptomatic of distress.

It is not uncommon for people to experience emotional distress despite a rational conviction that there is no reason to be upset (Greenberg & Safran, 1980). The case that cognitions do not necessarily causally influence emotions is argued persuasively by Zajonc (1980), who provides evidence that affective reactions may in fact be precognitive in nature. In a similar fashion, Leventhal (1979) maintains that affective reactions can take place independent of any reasoning or inferential processes. This perspective is entirely consistent with the comprehensive and well-articulated cognitive model of emotion developed by Arnold (1960, 1970). This model has important implications for the practice of cognitive therapy and for this reason some of its more relevant aspects will be outlined in the next section.

AN APPRAISAL-REAPPRAISAL MODEL OF AFFECT

According to Arnold (1960, 1970), emotion can best be conceptualized as an action tendency toward or away from something in the environment. In the words of Michotte (1980), emotion is a functional connection between an individual and his environment established by his reactions to it. Some emotions, e.g., "liking," tend to direct the individual toward the object of the emotion, whereas other emotions, such as "fear," tend to direct the individual away from the object of the emotion.

An extremely important characteristic of emotional reactions is that they are very direct and immediate in nature and in fact are more similar to sense perceptions than to logical inferences. Arnold employs the term *intuitive appraisal* to describe the emotional reaction or perception through which the environment is evaluated. The preface, intuitive, emphasizes the immediate, nonreflective nature of emotional perceptions.

A distinction between the more conceptual aspects of cognition and perceptual cognition has been suggested as a means of clarifying the role of affect in human functioning (Leventhal, 1979; Greenberg & Safran, 1980). Intuitive appraisals occur in the perceptual domain and develop by a process of perceptual learning. An infant learns to make fine perceptual

discriminations when it smiles at a human face, and does so without any reflective conceptual learning. The intuitive appraisal of whether to move toward or away from something can similarly be developed in the absence of conceptual information processing. This appraisal process thus has very little to do with conscious thinking. The experience of appraising something as threatening is more similar to seeing a table than it is to solving a syllogism. There is something immediate and irrevocable about it. This is not to say that there is no thinking or reasoning that takes place when someone reacts affectively, for, unlike animals, human beings think about feeling. This is termed the *reappraisal process.*

The initial appraisal process is accompanied by a specific pattern of physiological concomitants. For example, when the intuitive appraisal is one of fear, there is an accompanying physiological response that consists of components such as increased respiratory rate, elevated heartbeat, and increased perspiration. The reappraisal process evaluates both the initial phenomenology and the physiology that constitute the intuitive appraisal process. The product of this reappraisal process is the emotional reaction that the individual finally experiences. Because the reappraisal process involves more reflection than the initial appraisal process, it can potentially result in a more realistic evaluation of the situation than does the initial appraisal.

Imagine the situation in which a university student sits down to begin writing a final exam. Although he typically does well on exams, this exam is a particularly important one to him since 90% of his final mark will be based on it. As he reads the first question, he experiences a jolt of fear. His heart starts pounding and he can't think straight. This is the initial appraisal process. Before there is time to become engaged in a full-scale panic reaction, however, he reappraises the situation. "There's no reason to get excited," he thinks to himself. "I've written a hundred tests just like this before and I've never failed yet. Anyway, even if I do fail, it won't be the end of the world."

Note the similarity here between the reappraisal process and the type of coping statement that Meichenbaum (1977), or the rational reevaluation that Goldfried (Goldfried & Davison, 1976), might teach a client to employ. If the student in the example above has a deficient reappraisal process, an appropriate therapeutic intervention may consist of teaching him a more rational reappraisal process similar to the spontaneous reappraisal depicted above. It is our experience that this is often the case and, in fact, a therapeutic intervention which consists of eliciting automatic thoughts or negative self-statements, and teaching coping statements, has been found to be effective, as Meichenbaum (1977) and Mahoney (1974) would suggest.

CLINICAL COMPLICATIONS

As discussed earlier, however, spontaneously generated coping statements are not always therapeutic. Clinical observation indicates that often this spontaneous rational reappraisal process acts as an impediment to helping the client to become aware of the dysfunctional automatic thoughts or negative self-statements that more accurately represent the intuitive appraisal.

In fact, clients can become so adept at being "reasonable" and "sensible" that it can be extremely difficult to uncover or highlight the cognitive distortions that precipitate the problem. In this type of situation, prematurely teaching the client to employ covert coping statements can be as ineffective as any power of positive thinking campaign can be at its worst. What is therapeutically required here is a procedure for helping the client to disentangle the intuitive appraisal from the reappraisal process in order to more clearly highlight and bring his or her attention to the intuitive appraisal. Once this appraisal has been more clearly isolated, the therapist can help the client to represent it verbally. This enables the client to acquire a tangible sense of the fashion in which his or her own cognitive activity contributes to the problem. Only after this takes place is it useful to attempt to help the cleint to reappraise the situation more rationally.

In some cases, the client's spontaneous reappraisal can be quite dysfunctional in nature and can modify a potentially adaptive intuitive appraisal. The following clinical example illustrates such a case.

A 52-year-old diabetic woman sought therapy because she could not stop worrying obsessively that she would go into insulin shock and become comatose. Although medical consultation indicated that with regular dietary precautions there was no reason to worry, she could not rid herself of the fear, and prior to commencement of therapy her fears had become extremely disabling. In therapy she revealed that the stimulus for her obsessive worrying was a "strange feeling of detachment" that would come over her at different times during the day. She would interpret these feelings, which she described as "awful" and "unpleasant," to herald a potential coma and would immediately ingest large quantities of fruit juice, which she always kept on hand, in order to raise her blood-sugar level. She would thus spend the majority of her day either worrying about becoming comatose or taking precautions of one form or another. Although, at first, no specific pattern to her worrying emerged, self-monitoring data indicated that her feelings of detachment sometimes followed disagreements she had with her husband. Further investigation revealed that she very rarely experienced anger and was even less likely to express it when she did. In addition, she found it difficult to express any

fears and anxieties she had about issues such as the fact that her only child would be leaving home soon, maintaining that such feelings were "silly" and "unbecoming."

Further investigation corroborated that a substantial component of this woman's problem arose from the fact that in both of the above situations an initially accurate primary appraisal was being modified by a reappraisal process that was more in line with a value system she subscribed to, which maintained that it was wrong to experience certain feelings.

Although she did not subjectively experience feelings such as anger or anxiety about losing her child, the physiological concomitant of those feelings was still taking place. As part of the reappraisal process, an attribution would be made to account for these physiological changes, and the theory that she developed was that her blood sugar had become critically low and insulin shock was imminent.

This case vividly demonstrates the fashion in which a dysfunctional reappraisal process can result in inaccurate causal attributions that manifest themselves as clinical symptomatology and can modify an initial intuitive appraisal process that is accurate in nature and could potentially be adaptive. In this particular case, the woman's inability to experience anger toward her husband or to experience anxiety in anticipation of her child's departure prevented her from coping with some very real problem situations.

We have found there are certain types of intuitive appraisals that are consistently distorted by the reappraisal process in clinical situations. A more general and less complex version of the pattern illustrated above appears to consist of a general constriction in the area of the experience of anger. It is not at all uncommon to find situations in which clients who complain of chronic anxiety are modifying an initial appraisal that would result in anger or irritation by reappraising in a fashion that produces an anxiety response. This is often the case when for one reason or another the client has come to believe that the experience of anger is "bad," "impolite," or "ignoble."

It is also particularly important to note that in this type of situation, introspective accounts as to the cause of the anxiety can either draw a blank or in other cases be quite creative but not necessarily accurate. Nisbett and Wilson (1977) have demonstrated in a series of experiments that subjects are consistently inaccurate when asked to introspect about the causes of their own behavior. While their research has been criticized on the grounds that the real causes were intentionally concealed from the subjects (Smith & Miller, 1978), the fact remains that subjects will confidently make causal attributions on the basis of whatever theories or information is available to them when the relevant information is concealed or obscured.

Another type of intuitive appraisal that is often obscured in clients is what might be thought of as an admission of vulnerability. Clients often find it difficult to acknowledge that they feel sad or that they feel interpersonally needy. Again, it is important to emphasize here that an experienced difficulty in acknowledging a certain emotion is not necessarily restricted to the public realm as a part of impression management. An initial intuitive appraisal can be reappraised in such a fashion that the original emotion is not experienced subjectively. The following example illustrates such a case.

A 27-year-old female graduate student came into therapy displaying symptoms of depression. She had been living on her own in a different city from her parents for 7 years and had very little contact with them. Although she appeared to be quite socially skilled and was well liked by her peers at school, she had no real intimate relationships. Although she had had a few casual sexual relationships in her life, she had never had an ongoing intimate relationship with a man. What impressed the therapist most about her was the tremendous quality of stoicism that she displayed. She seemed to have no human needs or frailties. When asked if she regretted the lack of intimate relationships in her life, she would reply philosophically, "That's the way it is." Whenever she experienced some failure or disappointment in her work, she would shrug her shoulders but never acknowledge any sadness or disappointment.

It has been our experience that cases of this type are not uncommon in clinical practice. What distinguishes this woman is not the presence of cognitive distortions in Beck's (1976) sense, nor a lack of general activity or social skills (Lewinsohn, 1974), but rather an impaired ability to experience feelings of weakness and vulnerability and to act adaptively in response to them. She consistently reappraises her experience in rational terms and does not recognize any needs she feels for real interpersonal contact. Only after she acknowledges that she feels these needs can she go about trying to satisfy them.

Feelings such as "I feel lonely" or "I feel vulnerable" or "I feel weak" have their origin in intuitive appraisals that can be accurate in nature and potentially adaptive. An appraisal of loneliness can motivate someone to communicate and form relationships with others. An appraisal of weakness can motivate someone to seek help or comfort. The recognition of these feelings is the glue that holds fulfilling human relationships together.

In the above situation a therapeutic emphasis on rationally re-evaluating the situation would only have helped to increase the client's isolation. Instead, it was helpful to point out to her the fashion in which she consistently reappraised situations so as to obscure any real feelings

she might have experienced. The therapeutic work involved helping her to access her intuitive appraisals, and then to take the necessary actions to make her life more satisfactory.

SUMMARY AND TREATMENT IMPLICATIONS

The notion that the rational reappraisal of an affective response can be maladaptive is not a novel one and in fact is a fundamental tenet of many ego-analytic and humanistic therapies in which concepts such as denial and rationalization are central. It is our hope, however, that the present use of a theoretically neutral language derived from general psychology will facilitate the type of therapeutic rapprochement advocated by Goldfried (1980).

By distinguishing between appraisal and reappraisal processes, we wish to draw the cognitive therapist's attention to the importance of accurately assessing what Ableson (1963) has termed "hot cognitions." Both spontaneous client reappraisals and premature attempts to train the client to use coping statements can impede this process.

As both Arnold (1960, 1970) and Zajonc (1980) have indicated, a prerequisite for the cognitive representation of affective experience is the allocation of attentional resources to the intuitive appraisal. This process can be facilitated in therapy. The therapist should be sensitive to physiological changes such as increased breathing or blushing, which mark the presence of intuitive appraisals. Well-timed questions such as: "How do you feel?" or "what are you aware of now?" can be effective in guiding the client's attention to the intuitive appraisal, which can then be represented cognitively. Procedures for guiding attentional allocation in a therapeutic context have been described in detail elsewhere (Greenberg & Safran, 1980, 1981), and interventions for eliciting hot cognitions in cognitive therapy have been outlined by Safran and Greenberg (in press).

REFERENCES

Ableson, R. P. Computer simulation of "hot cognitions." In S. Tomkins & S. Mesick (Eds.), *Computer simulations of personality*. New York: Wiley, 1963.

Arnold, M. B. *Emotion and personality*. New York: Columbia University Press, 1960.

Arnold, M. B. *Feelings and emotions: The Loyola Symposium*. New York: Academic Press, 1970.

Beck, A. T. *Cognitive therapy and the emotional disorders*. New York: International Universities Press, 1976.

Cacioppo, J. T., Glass, C. R., & Merluzzi, T. V. Self-statements and self-evaluations: A cognitive response analysis of heterosocial anxiety. *Cognitive Therapy and Research*, 1979, *3*, 249-262.

Craighead, W. E., Kimball, W. H., & Rehak, P. J. Mood changes, physiological response, and self-statements during social rejection imagery. *Journal of Consulting and Clinical Psychology,* 1979, *47,* 385-396.

Goldried, M. R. Toward the delineation of therapeutic change principles. *American Psychologist,* 1980, *35,* 991-999.

Goldfried, M. R., & Davison, G. C. *Clinical behavior therapy.* New York: Holt, Rinehart & Winston, 1976.

Greenberg, L. S., & Safran, J. D. Encoding, information processing and the cognitive behavioural therapies. *Canadian Psychology,* 1980, *21,* 59-66.

Greenberg, L. S., & Safran, J. D. Encoding and cognitive behavior therapy: Changing what clients attend to. *Psychotherapy: Theory, Research and Practice,* 1981, *18,* 163-169. 9.

Kendall, P. C., Williams, L., Pechacek, T. F., Graham, L. G., Shisslak, C. S., & Herzoff, N. Cognitive-behavioral and patient education interventions in cardiac catheterization procedures: The Palo Alto medical psychology project. *Journal of Consulting and Clinical Psychology,* 1979, *47,* 49-58.

LaPointe, K. A., & Harrell, T. H. Thoughts and feelings: Correlational relationships and cross-situational consistency. *Cognitive Therapy and Research,* 1978, *2,* 311-322.

Leventhal, H. A perceptual-motor processing model of emotion. In P. Pliner, K. Blankenstein, & I. M. Spigel (Eds.), *Perception of emotion in self and others* (Vol. 5). New York: Plenum, 1979.

Lewinsohn, P. M. Clinical and theoretical aspects of depression. In K. S. Calhoun, H. E. Adams, & K. M. Mitchell (Eds.), *Innovative treatment methods in psychopathology.* New York: Wiley, 1974.

Mahoney, M. J. *Cognition and behavior modification.* Cambridge, Massachusetts: Ballinger, 1974.

Meichenbaum, D. *Cognitive-behavior modification: An integrative approach.* New York: Plenum Press, 1977.

Michotte, A. E. The emotions regarded as functional connections. In M. L. Reymert (Ed.), *Feelings and emotions.* New York: McGraw-Hill, 1980.

Nisbett, R. E., & Wilson, T. D. Telling more than we know: Verbal reports of mental processes. *Psychological Review,* 1977, *84,* 231-259.

Safran, J. D. The functional asymmetry of negative and positive self-statements. *The British Journal of Clinical Psychology,* in press.

Safran, J. D. & Greenberg, L. S. Eliciting "hot cognitions" in cognitive therapy: Rationale and procedural guidelines. *Canadian Psychology,* in press.

Smith, E. R., & Miller, F. S. Limits on perception of cognitive processes: A reply to Nisbett and Wilson. *Psychological Review,* 1978, *85,* 355-362.

Sutton-Simon, K., & Goldfried, M. R. Faulty thinking patterns in two types of anxiety. *Cognitive Therapy and Research,* 1979, *3,* 193-203.

Zajonc, R. B. Feeling and thinking: Preferences need no inferences. *American Psychologist,* 1980, *35,* 151-175.