ELICITING “HOT COGNITIONS” IN COGNITIVE BEHAVIOUR THERAPY: RATIONALE AND PROCEDURAL GUIDELINES

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ABSTRACT
A distinction can be drawn between “hot” or affectively laden cognitions, and “cold” or rational, affect free cognitions. In the present paper we argue that the cognitive therapists should be particularly interested in their clients’ hot cognitions since the problems which bring people into therapy rarely stem from cold cognitions, independent of affective processes. Four procedures which can be useful for eliciting hot cognitions in therapy are discussed. These are: 1) educating clients as to the existence of intuitive appraisals, 2) helping them distinguish between appraisals and reappraisals, 3) promoting vivid reconstruction of past experiences, and 4) guiding attention to intuitive appraisals. The relationship between eliciting hot cognitions and behavioural skill training is also discussed.

Although there are a variety of procedural differences between the therapeutic interventions developed by cognition behaviour therapists such as Meichenbaum (1977), Ellis (1962), and Beck (1976), two common components which have been identified are: (1) obtaining insight into negative self-statements or automatic thoughts, and (2) learning to use coping statements. We have found that often the initial process of eliciting the dysfunctional automatic thoughts is an extremely difficult one and that these mediating events are not always readily available to clients. As Golfried (1979) has noted, it is not unusual to encounter individuals in clinical settings “who have great difficulty in describing the internal dialogue that may be mediating their upset in any given situation” (p. 141).

Although extensive descriptions of procedures for eliciting automatic thoughts have been published (cf. Beck, Rush, Shaw & Emery, 1979), these descriptions typically do not deal with the situations wherein these cognitions are not readily accessible. Much has been written about problems involved in the accuracy of self report, and particularly relevant for the present discussion are the more general questions of what types of cognition processes individuals have access to, and under what conditions this access is facilitated (cf. Nisbett & Wilson, 1977; Smith & Miller, 1978; Ericsson & Simon, 1980).

It is our contention that there is a fundamental difference between two types of data that therapists can elicit from their clients: hot cognitions and cold cognitions. These two types of data are different in a clinically meaningful sense and the conditions for facilitating access to these two types of data are different. What do we mean by hot versus cold cognitions? Ableson (1963) originally coined these terms to distinguish between cognition mediating processes which are affective in nature versus those which are affect free.

We shall use this distinction in the clinical context in the following fashion: If a client is asked “What sort of thoughts were running through your mind when you left the party early last weekend?” and she replies in a rather calm fashion: “Well I knew it wasn’t true, but it passed through my mind that people were staring at me”, chances are good that this is a cold cognition. There is little affect attached to it and the client has had time to think about it and process it rationally. An apparent detachment is evidenced both by the content of the response, and as well as the lack of immediacy in the way the client responds.

Imagine, however that the client has been sitting extremely quietly in a group therapy setting, leaning back in his chair clutching tensely at the armrests. The therapist asks him what he is thinking and he responds hoarsely and virtually in tears: “I feel that everyone is staring at me.” Here there is very little doubt that the response is affect laden and that the
client is truly experiencing what he is saying and not simply calmly hypothesizing about his thinking. This affectively laden cognition in which the client experiences the significance of what he is saying would be a hot cognition.

In our opinion, it is this type of hot cognition that the therapist is interested in bringing into awareness in therapy in preference to cold cognitions. The problems which bring the client to therapy do not stem from general errors in logical processes which are independent of perceptual and affective processes (Greenberg & Safran, 1980). Given the fact that affective processes play such a central role in most problems which bring people to therapy, it is of vital importance to have a comprehensive theory regarding the nature of affective processes and their relationship to other cognition processes. In the cognition area, Norman (1980) has recently called for this type of integration stating that the cognition system is subservient to the biological regulatory system and that emotions play a critical role in behaviour.

Safran and Greenberg (in press) have argued that Arnold's (1960; 1970) distinction between appraisal and reappraisal processes is heuristically valuable for conceptualizing the fashion in which hot and cold cognitions interact in a therapeutic context. Arnold views affective experience as a response syndrome which consists of both an immediate intuitive appraisal as well as a more reflective reappraisal. The intuitive appraisal has both physiological and phenomenological components. Despite the presence of a phenomenological component, however, it is similar to sensory experiences such as touch and taste in that no upper level cognition is involved. The appraisal of fear, for example, might be experienced as a chill down the back of the neck, or a knot in the stomach.

The reappraisal is the cognition process through which the individual construes the initial appraisal. It is the process through which the initial sensory experience becomes cognitively represented. To continue our example, the individual who becomes aware of a stomach knot may accurately reappraise this experience as: "I'm afraid". The reappraisal is, however, more reflective than the intuitive appraisal and does not always map on to it perfectly. It is influenced by the individual's a priori theories as to what type of affective reactions are probable and what emotions are acceptable, given his or her value system. It is thus possible for the individual in the above example to incorrectly reappraise the experience as: "I'm sick."

In the therapeutic setting, the reappraisal process can distort or obscure an important intuitive appraisal and make it difficult for the therapist to assess it accurately. A client can, for example, reappraise anxiety as boredom or anger as sadness (Safran & Greenberg, in press; Safran, in press).

Consistent with this position, Zajonc (1980) reviews evidence suggesting that affective processes derive from a system which is parallel and partially independent from other cognitive processes. He maintains that because of this partial independence, affective reactions are not always accompanied by a cognitive representation. They may remain encoded only as visceral or muscular symbols in the same fashion as motor skills. The chances, however, of a cognitive representation existing will be increased if (a) the individual thinks about the affect and (b) communicates affect to someone else. One of the implications of this postulated independence of affective and cognitive systems is that in some cases the clinician may be attempting to elicit from the client data which simply do not exist at that time.

In situations of this type, the clinician may be tapping a reappraisal process which is not an accurate cognitive representation of the intuitive appraisal. In other words, clients' cold cognitions may not faithfully reflect their hot cognitions. In the next section, we will outline a number of clinical procedures which can be employed in order to facilitate the access of hot cognitions. These procedures will not be completely unfamiliar to clinicians from effectively oriented approaches such as client centred or gestalt therapy. Our present objective is not to develop yet another new therapeutic approach, but rather to suggest some technical refinements to expand the cognitive therapist's practice in a fashion consistent with contemporary cognitive theory. While the integration of diverse therapeutic traditions is not here our primary objective, we do view any such rapprochement which ensues as a desirable process.

**Clinical Procedures**

Detailed below are a number of clinical
Eliciting Hot Cognitions

procedures which we have found therapeutically useful for eliciting “hot cognitions”.

1. **Education.** Clients who consistently re-appraise emotions in a fashion which obscures or distorts them have learned that it is wrong to experience certain emotions. The therapist can ask questions to determine the fashion in which this socialization process has taken place and to help the client understand it. It is important to convey to clients that they can learn to experience their feelings just as they have learned not to, and that part of therapy will consist of this learning process. If the client is sophisticated enough, the appraisal-reappraisal framework described here and by Safran and Greenberg (in press) can be discussed. The importance of paying attention to the intuitive appraisal or fleeting perceptions (Greenberg & Safran, 1980) should be a theme which is returned to again and again. The functional and adaptive nature of feelings and their role as signals of the need to problem solve should be explained (Goldfried & Davidson, 1976).

2. **Distinguishing between appraisal and reappraisal.** Initial probing by the therapist is often just as likely to elicit verbal representations of the reappraisal as it is the appraisal. In the situation when the client says of his or her intuitive appraisal “I know this is silly”, or “I don’t really believe this”, the therapist can ask the client to “leave the rational part behind”. Clients can pretend that they are two different people and that their task for a brief period of time is to show the therapist the less reflective, less rational one. Clients should be reminded that of course the reappraisal process has an important role to play as well, but for the time being, it is important to gain some facility at distinguishing between the initial appraisal and the reappraisal. Greenberg (1980) has characterized the Gestalt two chair dialogue as taking place between two aspects of the person: the more rational reappraising part, which denies the existence of certain feelings, and the experiencing part, in which the intuitive appraisals emerge. He has shown that changes in both of these aspects are necessary for resolving internal conflict.

3. **Vivid reconstructions.** Retrospective accounts about feelings or thoughts that the client might have had at some point in the past, are more likely to tap cold cognitions than hot cognitions. The therapist should do everything possible to increase the immediacy of the experience the client is describing. Active techniques such as role plays and dramatizations are useful for this purpose. Clients who tend to have vivid imagery can benefit from closing their eyes and imagining relevant scenes. The therapist can facilitate this process by verbal descriptions of the situation and by well timed verbal probes regarding feelings and thoughts. It is also useful for the therapist to employ vivid and metaphorical language when attempting to convey to the client an understanding of the feelings that the client experiences. Often clients who are not particularly emotionally expressive can have the intensity of their own experience increased in this fashion. Rice (1974), taking an information processing approach to client centred therapy, has shown how “evocative” responding to clients helps them return to the situation, experience it freshly and access intuitive appraisals not necessarily available in their rational reconstructions of the situation.

4. **Attentional allocation.** Covert processes can be brought to awareness by attending to them (Greenberg & Safran, in press). Affective reactions which have not been encoded cognitively are often manifested in nonverbal behaviours (Zajonc, 1980). Some of the best cues the therapist has as to the presence of hot cognitions are changes in nonverbal behaviour. Blushing, shallow or rapid breathing, facial gestures, hand and body movements, can all herald the presence of affective responses which are not necessarily clearly represented cognitively. The astute therapist can employ these cues as markers for guiding clients’ attention to their covert processes. Clients can then report upon their subjective experiences at critical points, and in so doing, establish an accurate cognitive representation of their intuitive appraisals.

**Skill Training**

It is essential for the therapist to assess whether or not clients have the skills in their repertoires to implement socially competent behaviours which may be required to deal with newly represented intuitive appraisals. The lonely individual may have a social skills deficit. The angry wife may have to learn how to present her requests in an assertive fashion.
Training should be provided by the therapist to remedy any skill deficits that clients may have.

Newly emerging hot cognitions may lead to frustration when appropriate skill training is not provided. Conversely, teaching behavioural skills to clients who have not accurately represented their affective reactions may be of limited value. Hot cognitions provide the impetus for clients to learn and implement new skills. The socially isolated individual has no reason to learn social skills unless he becomes aware of his loneliness. The depressed wife has no reason to demand change in her marriage, unless she realizes she is frustrated and angry with her husband.

**Conclusion**

Contemporary cognitive psychology, while contributing much to our understanding of humans as rational information processors, has tended to ignore the role of affect in human functioning (Zajonc, 1980). While cognitive therapists stand to benefit from drawing upon experimental cognitive psychology (Goldfried, 1979), there is no need for them to emulate this imbalance.

Elsewhere we have argued that a thorough and accurate assessment of the client’s “hot cognitions” constitutes a vital phase in effective cognitive therapy (Safran & Greenberg, in press). In the present paper, we have further clarified the role of affectively laden cognitions in cognitive therapy, and provided procedural guidelines for the practicing cognitive therapist.

**RÉSUMÉ**

Une distinction peut être faite entre les cognitions “froides”, c’est-à-dire dénudées d’affect ou de rationnel. Dans cet article, nous soutenons que les thérapeutes d’orientation cognitive devraient s’intéresser plus particulièrement aux cognitions dites “chaudes” de leurs clients étant donné que les problèmes qui amènent les gens habituellement à se présenter chez un thérapeute proviennent rarement de cognitions de type froide; c’est-à-dire indépendante des processus affectifs. Quatre procédures pouvant s’avérer utiles pour éliciter des cognitions chaudes en thérapie sont présentées. Il s’agit: (1) d’informer les clients de l’existence des modes intuitifs d’évaluations, (2) de les aider à distinguer entre les évaluations et les réévaluations, (3) d’encourager la reconstruction vivide d’expériences passées, et (4) d’orienter leur attention vers les évaluations intuitives. La relation entre l’élicitation de cognition chaude et l’entrainement aux compétences comportementales est également présentée.

**References**


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