The Analysis of Verbal Behavior 1986, 4, 30-38

Dysfunctional Control by Client Verbal Behavior: The Context of Reason-Giving

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Dysfunctional control exerted by reason-giving in adult psychopathology is interpreted from a radical behavioral perspective. Verbal-social contingencies which support the establishment of reason-giving and its control over maladaptive actions are reviewed. A contextual approach to psychotherapy, comprehensive distancing, which attempts to weaken dysfunctional verbal control is described briefly. Data relevant to therapeutic process are presented. The overall results suggest that comprehensive distancing facilitates therapeutic change through a process consistent with a behavioral analysis of reason-giving. Suggestions for further research and radical behavioral approaches to psychotherapy are discussed.

The Context of Reason-Giving

What clients say has long been a concern within traditional forms of psychotherapy. With relatively few exceptions (Ferster, 1972, 1979a, 1979b; Glenn, 1983; Layng & Andronis, 1984; Wynne, 1984; Zettle, 1980; Zettle & Hayes, 1982), radical behaviorists have paid little attention to the potential role client verbal behavior may play in the establishment, maintenance, and modification of adult pyschopathology.

One factor contributing to this neglect has been the lack of a basic research data base from which applied strategies and principles could be derived. Until recently basic research in instructional control, stimulus equivalence, rule-governed and verbal behavior, and related topics was seldom published by behavior analysts. Recent endeavors in the basic (Bentall, Lowe, & Beasty, 1985; Catania, Matthews, & Shimoff, 1982; Devany, Hayes, & Nelson, in press; Hayes, Brownstein, Zettle, Rosenfarb, & Korn, in press; Matthews, Catania, & Shimoff, 1985), applied (Zettle & Hayes, 1984), and conceptual (Hayes, in press; Zettle & Hayes, 1982) dimensions of rule-governed behavior, however, have yielded findings relevant to client verbal behavior and behavioral approaches to psychotherapy.

By default, concerns about client verbal behavior until now primarily have been the domain of methodological behaviorists and cognitivists (e.g., Beck, 1976; Ellis, 1962, 1973; Mahoney, 1974). They have conceptualized the effects of client self-talk on other actions as an issue of "cognitive" rather than verbal control (cf. Ericsson & Simon, 1984). Covert verbal behavior is assumed automatically to cause other actions and what clients actually say in interchanges with their therapists is used to infer the content of such private speech. Neglected altogether is an analysis of the actual contingencies necessary to support a controlling relationship between client verbal behavior and maladaptive actions.

This paper focuses on a specific subclass of verbal behavior, reason-giving, which often appears to exert dysfunctional control in adult clients. First, an interpretation of the maladaptive role which reason-giving may play in psychopathology will be undertaken. This will be followed by a description of a novel behavioral approach to psychotherapy which specifically seeks to weaken such control and a discussion of some related research.

Portions of this paper were presented at the meeting of the American Psychological Association, Los Angeles, August 1985.

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Dysfunctional Control Exerted by Reason-Giving

The term "reason-giving" as used here simply refers to verbal explanations and justifications that clients give for their actions. Such verbal behavior apparently is established in early childhood (Deitz, 1985) in response to inquiries by the verbal-social community. The community typically asks questions like, "Why did you do that?," "Why are you doing that?," "Why are you going to do that?," and selectively reinforces characteristic responses.

The explanations offered in such interactions seldom are derived from a functional analysis of the behavior in question for at least two reasons. For one, the verbal-social community often has limited access to the behavior about which it asks and its controlling variables. Accordingly, differential reinforcement cannot be provided precisely for verbal reports controlled by the same variables of which the behavior under question is a function. A second and equally important reason is even if individuals could somehow give an accurate functional analysis of their actions, such verbal behavior would be socially unacceptable. The nonmentalistic explanations required by a functional analysis of behavior are discouraged in everyday discourse.

Common social observations as well as the results of recent research (Hayes, in press) suggest that most explanations typically given for actions refer to thoughts and feelings (e.g., "I did it *because* I thought it was a good idea." or "I didn't say anything *because* I was too embarrassed."). In short, private events are accepted as "good" reasons by the verbal-social community. Emphasis is placed on the form of the verbal behavior rather than on specific functional units. Because giving "good reasons" is likely to lead to social benefits to the reason-giver, strong control over reason-giving by audience factors and states of reinforceability seems probable. Thus, even reasons which refer to external environmental events are likely at best to be impure tacts (Skinner, 1957).

Reasons which make reference to private events would not be problematic were it not for that fact that they are seen by the verbal-social community and reason-givers themselves as causes for actions. Reason-giving based on private events can easily be confused with causal statements because they are emitted in response to questions about behavioral causes.

From the standpoint of radical behaviorism, one behavior is not usefully thought of as an initiating cause of a second action by the same organism. Initiating causes are limited to manipulable environmental events (Skinner, 1953, 1969, 1974; see Hayes & Brownstein, 1986, for a discussion) because in its highest form the word "cause" is reserved for events that can fulfill the dual purposes of science: prediction and control. Only events external to behavior can directly serve both of these purposes; behavior can never *directly* be used to control another behavior in the same individual. As Skinner (1953, Ch. 15) illustrated in his analysis of self-control, one action may participate in a controlling relationship with another, but only provided contingencies are present which maintain a behavior-behavior relationship. As verbal behavior, reason-giving cannot exert any direct controlling relationship over actions and can only exert whatever influence it does with support by external contingencies.

Cognitive-behavior therapists perhaps should be recognized for calling attention to the importance of verbal behavior in understanding adult pyschopathology. Their explanations of cognitive control, however, remain incomplete until the contingencies which give rise to such cognitive control are themselves identified and analyzed. Along similar lines, social psychologists have generated many theories and a large body of research on the topic of self-attribution (Bem, 1972; Nisbett & Ross, 1980; Nisbett & Wilson, 1977). The critical issue, however, is not "What role do self-attributions, reason-giving, self-talk, and other types of verbal behavior play in controlling human behavior?," but "What types of contingencies would lead one type of behavior (reason-giving) to influence another (actions)?" Thus, the appropriate focus is not on reason-giving per se but on the contingencies supporting a behavior-behavior relationship between reasons, justifications, and explanations on the one hand, and the actions they are supposed to explain on the other.

The critical contingencies involved appear to arise from the same verbal-social context

which supports reason-giving as causal explanations in the first place. Because reasons are confused so easily with causal statements they are taken literally and become socially accepted as legitimate causes for a host of dysfunctional actions. In the presence of an adequate reason, the contingencies surrounding other behaviors change. A person with a good enough explanation for failing to meet a commitment, for example, may then abandon the agreed upon action without fear of strong social consequences. It is only somewhat of an exaggeration to state that in our culture one literally can "get away with murder" provided "good enough" reasons are given for such behavior. These social contingencies then can establish relationships between reason-giving and other behavior.

Relevance to Psychotherapy

Adults seeking psychotherapy commonly have one or more explanations for their complaints, with many of these making reference to private events. They may, for instance, insist their essential problem is excess anxiety, depression, social discomfort, or distrust in interpersonal relationships which interferes with more adaptive functioning. Implicit in such formulations is the assumption that if these "causes" can be removed, the difficulties they are thought to cause also will disappear. A related assumption is that if the private events "causing" dysfunctional behavior cannot be removed, the problems they are used to explain cannot be alleviated.

The verbal-social system supporting such assumptions is so pervasive in our culture that even most approaches to psychotherapy in effect endorse them (Hayes, in press). Most types of psychotherapy essentially seek to remove the "causes" which clients use to explain their dysfunctional actions. For example, behavior therapists may employ "anxiety-management techniques" (as if anxiety is a cause) while cognitive therapists seek to "restructure belief systems" (as if beliefs are causes). Our clinical disorders also are named in this same manner ("anxiety disorders," "affective disorders," etc.).

A Contextual Approach to Psychotherapy

An alternative psychotherapeutic strategy is to alter the verbal-social contingencies that support a controlling relationship between reason-giving and dysfunctional behavior. Hayes (in press) has recently outlined a contextual approach, comprehensive distancing, derived from a radical behavioral framework which adopts this strategy. Due to space limitations, only a strategic overview of comprehensive distancing will be presented here. The interested reader is advised to consult Hayes (in press) for a more detailed discussion.

Comprehensive distancing seeks to establish a special verbal-social community within therapy in which an attempt is made to alter the context of client verbal behavior, especially reason-giving. This accomplished through a series of didactic and experiential exercises which emphasize several major themes. One major theme is that deliberate attempts to control or eliminate unwanted private events is counterproductive in that these efforts often evoke the very private events which are to be eliminated, and also support the view that private events "cause" difficulties. For example, the obsessive-compulsive may privately say, "Whatever I do I must not think about wanting to choke my spouse." However, a rule of this sort often creates the very thought the client is attempting to avoid, and supports the original view that thoughts cause behavior. Thus, the more the client attempts to eliminate such thoughts, the more frequent and controlling they may become.

A second major theme of comprehensive distancing is that the reasons which clients offer as explanations for dysfunctional actions are themselves merely more behavior. Because there is no necessary controlling relationship between private events (e.g., self-condemning thoughts) and maladaptive actions (e.g., passivity), the explanations clients offer for their behavior cannot be complete or valid.

A final theme is that if clients react to their private events as "behavior in context" by, for instance, merely describing or tacting them, then it becomes possible for them to behave more effectively while also experiencing private events which otherwise would control dysfunctional actions. Agoraphobic clients, as an example, do not need to eliminate their anxiety before being able to enter a shopping mall; they can go to the mall *and* be anxious while doing so.

Related Research

In addition to evaluating the effectiveness of comprehensive distancing as a therapeutic

strategy, we have been interested in determining the degree to which its efficacy is related to its ability successfully to weaken dysfunctional control by reason-giving. To the extent that we find that comprehensive distancing is effective and operates in a manner consistent with our analysis of reason-giving, we support the validity of the analysis itself.

In one recent project (Zettle & Hayes, 1984), outpatient depressives either were treated with comprehensive distancing or one of two variants of Beck's (Beck, Rush, Shaw, & Emery, 1979) cognitive therapy. The comparison of comprehensive distancing with cognitive therapy seemed especially relevant given the demonstrated efficacy of cognitive therapy (Rush, Beck, Kovacs, & Hollon, 1977) and the differing approach it takes towards private events. Unlike comprehensive distancing which seeks to alter the functional control exerted by depressive thoughts, both cognitive therapy conditions, with their emphasis on cognitive restructuring, attempted to alter the form or content of such private events. While the outcome data will be presented elsewhere, we intend in this section briefly to present the study and then to examine the process data that bear on the validity of our analysis of reason-giving.

The study compared three conditions: comprehensive distancing, cognitive restructuring plus distancing (basically, this adhered closely to the guidelines for Beck's cognitive therapy for depression, Beck et al., 1979), and cognitive restructuring alone. In each condition, six clinically depressed women (e.g., Beck Depression Inventory ± 20) were seen individually for 12 weekly therapy sessions plus a two month follow-up. For our present purposes, the differences between the two variants of cognitive therapy is not of interest, so in all of the analyses which follow they were collapsed into one cognitive group for comparison with comprehensive distancing.

Results showed that both groups improved significantly. In general, however, the comprehensive distancing group was most effective on the outcome measures, such as the Hamilton Rating Scale for Depression (HRS-D; Hamilton, 1960). As shown in Figure 1, comprehensive distancing subjects displayed more dramatic reductions in levels of interviewer-rated depression. Nonparametric analysis using the Mann-Whitney test (Siegel, 1956) indicated significantly

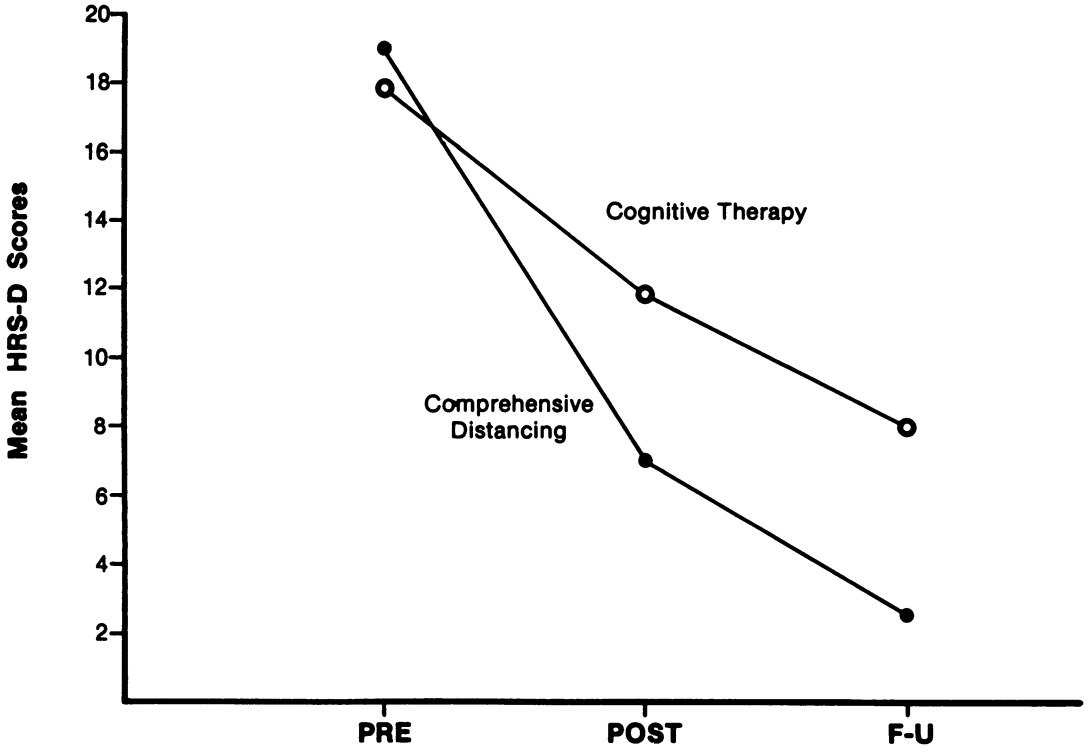

Figure 1. Mean HRS-D scores at pretreatment, posttreatment, and follow-up for treatment groups.

lower HRS-D scores at follow-up (U = 11.5, $p < .05$).

Of primary interest are the data relevant to reason-giving as a mechanism. Two measures were oriented toward this dimension.

Automatic Thoughts Questionnaire (ATQ)

The ATQ (Hollon & Kendall, 1980) is a 30-item questionnaire which assesses separately the frequency and degree of believability of negative thoughts associated with depression. Each thought is rated on a 1-5 scale on both frequency and believability dimensions.

Reasons Questionnaire (RQ)

The RQ was developed for this study. As can be seen in Table 1, subjects were presented with three scenarios, one involving an adaptive response and the other two depicting dysfunctional behavior. Subjects were asked to provide two sets of reasons for the actions described; first, ones that the person in each scenario might give for his/her response ("other reasons"), followed by a separate listing of reasons that they themselves would give for the same actions ("self-reasons"). Subjects next were asked to rate "how good" each reason was according to a 9-point Likert scale (e.g., 1 = Bad; 9 = Good).

Table 1

Reasons Questionnaire (RQ) Items

Adaptive Behavior: Euphoric Mood

Sheri wakes up feeling terrific, "on top of the world."

She sings along with the radio and smiles at everyone.

A friend asks her, "Why are you so happy today?"

What reasons might she give for her exuberance?

Dysfunctional Behavior: Overeating

Brenda is a middle-aged woman who is grossly overweight.

She joins Weight-Watchers and is determined to lose the weight.

She leaves the first meeting full of hope.

But when she returns the following week, she admits she just couldn't stick to her diet.

What reasons might she give the group for her eating?

Dysfunctional Behavior: Suicidality

John is feeling very depressed.

He believes his life isn't worthwhile anymore.

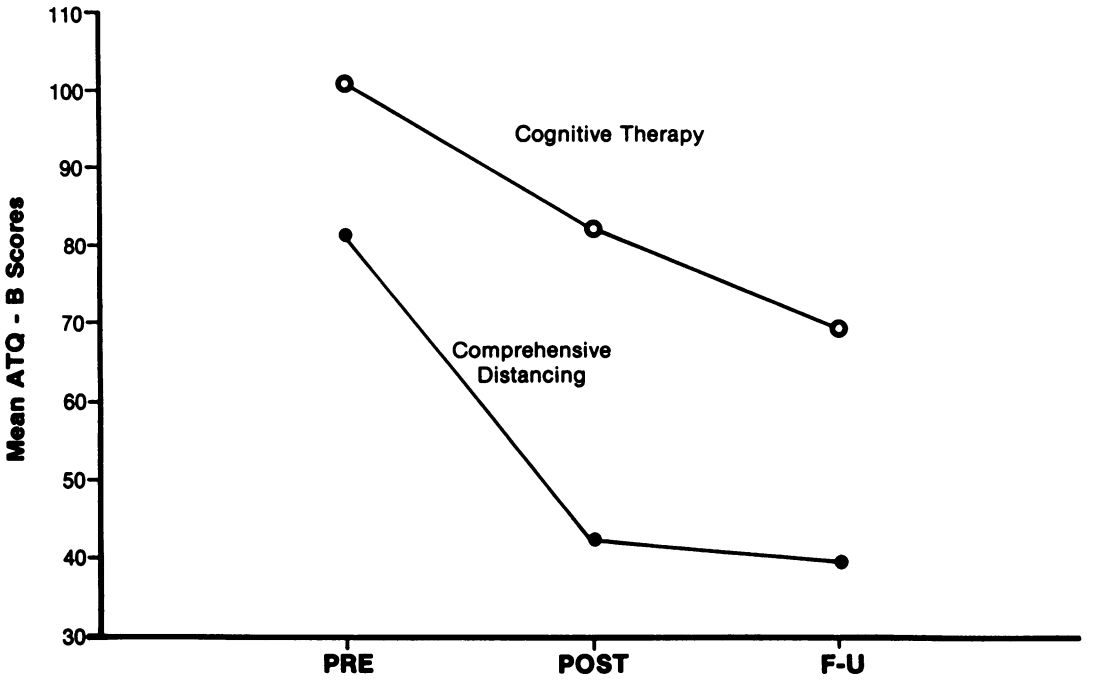

Figure 2. Mean ATQ-B scores at pretreatment, posttreatment, and follow-up for treatment groups.

He is playing with a gun and thinking about committing suicide.

What reasons might he give for being suicidal?

The ATQ and RQ were administered at pretreatment, at the conclusion of 12 weeks of treatment, and at two month follow-up. The ATQ was scored in terms of total frequency and believability ratings. On the RQ, a pair of judges were able reliably (98% agreement) to characterize each reason as one of three types: (a) external, the reason referred to environmental events with no mention of private events; (b) internal, the reason referred to private events with no mention of environmental events; or (c) both, the reason mentioned both types of events.

Process Results

The overall results suggested that comprehensive distancing and cognitive therapy operated through dissimilar processes. For ease of discussion, the findings will be broken down into those pertaining to particular process measures.

ATQ

Depressive beliefs often seem to be used by clients to explain their own depressive behavior. It was expected that comprehensive distancing would decrease the believability (but perhaps not the frequency) of negative thoughts. This prediction was supported by the data.

An analysis of the ATQ scores for frequency (ATQ-F) showed no differences between the two treatment groups. At pretreatment comprehensive distancing subjects reported significantly lower frequency ratings ($t(16) = 2.26$, $p = .04$). An analysis of change scores from pre to posttreatment and from pretreatment to follow-up indicated no differences between the two conditions. Thus, both groups reported significant but equivalent reductions in frequency scores across the course of the study.

A different pattern of findings was found on ATQ believability scores (ATQ-B). As indicated in Figure 2, a reduction in ATQ-B ratings across assessment occasions was obtained for both conditions. A violation of the assumptions required by parametric tests necessitated the use of a nonparametric analysis. A Mann-Whitney test detected no significant difference between the two groups at pretreatment. Significantly lower ATQ-B scores, however, were found for comprehensive distancing subjects at posttreatment ($U = 12.5$, $p < .05$). Differences at follow-up approached but fell short of a traditional level of statistical significance ($U = 17.5$, $p < .12$).

The overall results on the ATQ appear consistent with our analysis of comprehensive distancing. Significantly lower believability scores for comprehensive distancing subjects were not associated with similar differential reductions in frequency ratings. Stated somewhat differently, changes in believability of negative thoughts occurred independently of reductions in their frequency. Comprehensive distancing thus appeared to decrease the control exerted by depressive thoughts, as reflected by significantly lower ATQ-B scores, without necessarily eliminating their actual occurrence.

Reasons Questionnaire

External validity ratings. A primary objective of comprehensive distancing was weakening the control of reason-giving over other actions. It, therefore, was expected that comprehensive distancing subjects would show relatively greater reductions in overall validity ratings of reasons than those receiving cognitive therapy.

As mentioned, there were three categories of reasons ("external," "internal," and "both"). Due to a low number of "both" reasons, only the external and internal reasons were analyzed. With external reasons, as can be seen in Figure 3, comprehensive distancing subjects reported reduced validity ratings from pre to posttreatment, with cognitive therapy subjects showing increased ratings. An analysis of pre to 17 posttreatment change scores indicated significantly greater reductions for comprehensive distancing ($U = 8$, $p < .02$). Both conditions reported virtually identical ratings at follow-up. However, a sign test (Siegel, 1956) revealed a significant proportion of comprehensive distancing subjects with decreased ratings from pretreatment to follow-up ($p = .02$). The proportion of cognitive therapy subjects showing such change was not significant ($p = .73$).

Internal self-reasons for dysfunctional actions. No differences were found for validity ratings of internal reasons. In this analysis internal reasons which the subjects might offer for

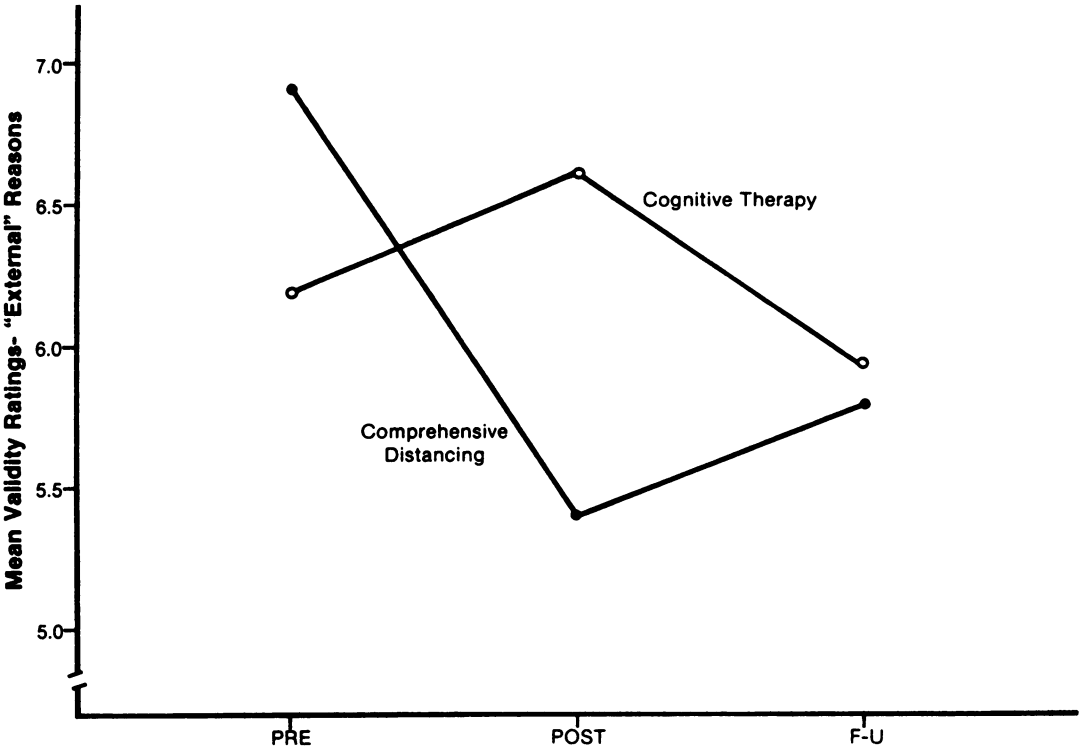

Figure 3. Mean validity ratings of external reasons at pretreatment, posttreatment, and follow-up for treatment groups.

their own actions ("self-reasons") were combined with those they attributed to the person depicted in the scenarios of the RQ ("other reasons"). In doing so, it seemed possible that differences between the two treatment conditions in validity ratings for internal self-reasons might be obscured. Because of its emphasis on the dysfunctional effects of reason-giving, comprehensive distancing was expected to be more effective in reducing the validity ratings of private events which subjects use to explain their own maladaptive behavior.

An analysis of validity ratings subjects made of their own reasons for engaging in the dysfunctional actions depicted in the RQ was undertaken. As displayed in Figure 4, different trends were obtained. Comprehensive distancing subjects showed a large reduction in validity ratings from posttreatment to follow-up, with a significant proportion reporting decreased ratings from pretreatment through follow-up (sign test, $p = .03$). Cognitive therapy subjects, by contrast, showed only a slight reduction in ratings from pretreatment to follow-up and a more noticeable increase from pre to posttreatment.

Summary and Conclusions

The overall results may be viewed as providing tentative support for comprehensive distancing as a means of reducing dysfunctional control exerted by reason-giving. Moreover, the findings were consistent in suggesting that comprehensive distancing induces therapeutic change in a manner different from that of cognitive therapy. Comprehensive distancing was more successful than cognitive therapy in reducing the believability, but not the frequency, of self-reported depressive thoughts. Similarly, comprehensive distancing led to greater reductions in the validity of both external reasons and internal self-reasons. To the extent that comprehensive distancing appears to work as expected, the behavioral analysis of verbal control from which it is derived may be viewed as receiving indirect support.

The overall results, however, must be viewed as preliminary. A relatively small sample of subjects was evaluated and all of

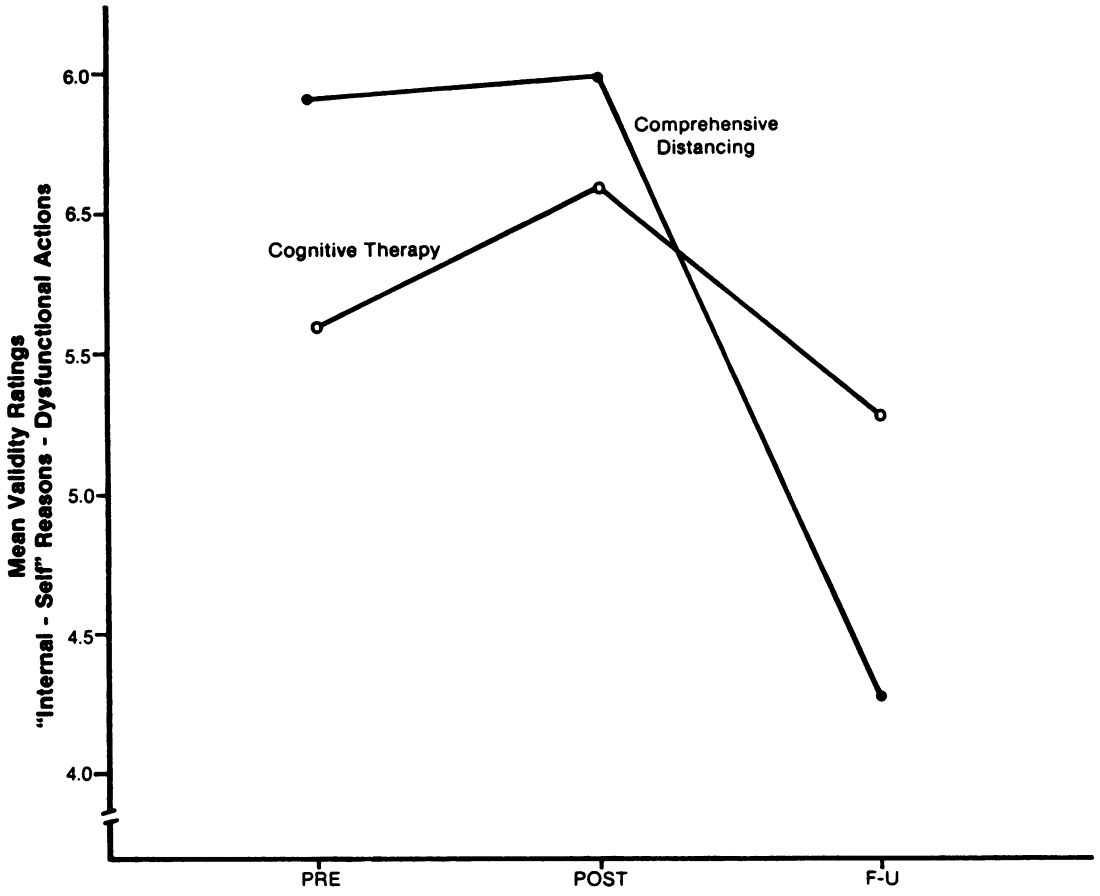

Figure 4. Mean validity ratings of internal self-reasons for dysfunctional actions at pretreatment, posttreatment, and follow-up for treatment groups.

the data were based on self-report. It is always possible that multiple sources of control may have affected the subjects' verbal verbal behavior, such as subtle verbal-social contingencies ("demand characteristics") present during the data-gathering process.

The behavioral conceptualization of reason-giving is not the same as cognitive conceptualizations of cognitive control. Thus, measures specifically designed to assess reason-giving may need to be developed. The present RQ is clearly only a beginning attempt in this regard. A more relevant reason-giving measure might be obtained by directly and repeatedly asking subjects to provide reasons for the specific problem for which treatment is being sought. With such a strategy it might be possible to employ a single-subject methodology (e.g., multiple-baseline across subjects) to determine more precisely the variables responsible for reductions in dysfunctional verbal control. Future measures of reason-giving might also be developed for a range of specific disorders.

Although there has been an increased interest in verbal behavior and rule-governed behavior in recent years, the degree to which such efforts have led to more effective clinical interventions is unclear. Comprehensive distancing is one of the few verbal psychotherapies based explicitly on behavior analytic conceptualizations of verbal control. The impact of this procedure supports the view that radical behaviorism has something clinically significant to add to the way client verbal behavior affects behavioral disorders.

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