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Roger Thomson
Wilfrid Laurier University

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IN A QUASI-THERAPEUTIC INTERVIEW

By

ROGER THOMSON

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Examining Committee

Dr. Vernon H. Schaefer, Chairman
Dr. Sidney Hellyer, Department of Psychology
Dr. Donald F. Morgenson, Department of Psychology

ProQuest LLC.
789 East Eisenhower Parkway
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Abstract

Previous verbal conditioning experiments were reviewed for the purpose of discovering variables which may be relevant to psychotherapeutic interviews.

An experiment was conducted which tested the idea that the semantic content of statements made by the interviewer may function as a cue or instruction for the subject to verbalize material of related content. Group and individual psychotherapy patients were used as subjects. Subjects were given instructions which either stressed or ignored the importance of cooperating with the interviewer. Interviewers interacted with subjects either by reflecting the affective content of the subjects' narrative or by making mild interpretive statements of non-affective content. The critical response class consisted of self-referred affect words. Interventions were not made contingent on the production of critical responses. Post-interview questions assessed the subjects' Reinforcement Hypotheses, Behavioural Hypotheses, and Behavioural Intentions.

It was found that the introduction of material of affective content resulted in higher rates of affective verbalization. Instruction had no effect on production of critical responses. There appears to be a relatively complex relationship between awareness and behaviour. Possible implications for clinical interviewing are discussed.

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Introduction

The interpersonal interactions and processes which occur between therapist and client in the course of a clinical interview may well be among the most complex and elusive events to be addressed by psychological research. A number of attempts have been made to integrate the clinical practice of psychology with experimentally derived models. John Dollard and Neal E. Miller introduced their classic Personality and Psychotherapy (1950) as an attempt to understand the practice of intra-psychic therapy from a learning theory standpoint, with a view toward stimulating research "in the therapeutic situation itself" (p. ix). Major advances were made by practitioners of client-centered therapy toward the empirical study of the processes of psychotherapy (Rogers and Dymond, 1954) and later research (Truax, 1964) has shown operant conditioning techniques to be an integral, though previously unrecognized, part of the client-centered technique.

One area of research frequently characterized as applicable to psychotherapeutic practices is the verbal conditioning literature. The early work of Joel Greenspoon (1955)

on the "Reinforcing effect of two spoken sounds on the frequency of two responses" is an example of this research. Greenspoon's two spoken sounds were "Mmm-hmm" and "Huh-uh," and they were presented contingent on the production of either plural, or non-plural nouns by subjects who were instructed to "say all the words you can think of." Evaluation of the data disclosed that "Mmm-hmm" produced learning effects for both of the dependent variables, while "huh-uh" increased the frequency of non-plural words, but decreased the frequency of plural words with respect to the control group, which received no stimuli. Greenspoon concluded that it was the response class, and not individual words, which became more probably with reinforcement, that this change in subject behaviour occurred without their awareness of the response-reward contingencies, and that "the differential effect on the two responses suggested that the nature of the response is a determinant of the reinforcing character of the stimulus." (p. 416) Additionally, this research raised several questions: What is a meaningful definition of "awareness" in this context? What factors or processes account for the differential reinforcing effects he observed? How does the artificiality and simplicity of the subject-experimenter interactions in Greenspoon's design affect the generalizability of his results to other, more practical situations?

Hildum and Brown (1956) used a different design in which 40 male students were interviewed via phone (to control visual cues) about their opinions of "general education." In addition to "Mm-hmm," the word "Good" was used contingent to responses which were in agreement with items of the questionnaire in two groups, and to opinions opposed to the items in two other groups. They reported that "Mm-hmm" interventions failed to produce any change in behaviour, but that "Good" did have a reinforcing effect. Their subjects did not believe that they were influenced by anything the interviewer said. Other research, conducted in "naturalistic" interactional situations (Adams and Hoffman, 1960; Moos, 1963; Rogers, 1960) generally demonstrates that various simple interpersonal events, such as looking up while murmuring "Mm-hmm" and head nods in conjunction with the same sounds were effective in increasing the frequency of self-referent verbalizations and statements of independence or affection. Taken as a whole, this research demonstrates that verbal behaviour may be influenced by a variety of stimuli and in a variety of situations, but the question of what makes the behaviour of an interviewer a reinforcing event (especially as applied to clinical situations) is still not sufficiently addressed.

The work of W. S. Verplank (1955) studied the use of paraphrasing statements, grossly approximating the reflective techniques of client-centered treatment, as reinforcing events. He attempted to condition statements of opinion in a seemingly casual, unstructured conversation between the subject and experimenter, using either statements of agreement or paraphrases as contingent stimuli. Verplank reports that all of his subjects demonstrated an increased rate of speaking opinions, and that their overall rate of statement production did not change significantly throughout the procedure. This indicates that the attention provided by the experimenter did not have an indiscriminate effect on all statements and that the decreased rate of speaking opinions in the extinction period was not a result of a general decline in verbalizations. He also reported that paraphrases had a much more variable reinforcing effect than statements of agreement.

An hypothesis which may be useful in explaining this finding would probably have to be derived from the communicative process which occurs during the interview. It seems likely that such widespread symbols of approval as an affirmative head nod or a direct statement of agreement could be easily and accurately decoded by a subject. Paraphrasing statements, on the other hand, seem to be inherently more

open to variation: they must be encoded by the sender accurately, the message expressed is more complex and more easily confused in the decoding process because of its context, the receiver's idiosyncratic associations or a number of other variables. There is even some ambiguity in a comparatively simple sound like "Mm-hmm," which, depending on inflection, context, etc., could convey agreement, boredom, impatience or perhaps other meanings. In this light it is not surprising that Verplank reported greater variability in the effects of a type of communication which is inherently subject to more distortion.

An understanding of the communicative properties of reinforcing events seems important in explaining the results presented by Adams and Frye (1964). They reinforced all personal references spoken during a structured interview with four different classes of experimenter behaviour: mild affirmatory words, interpretive statements "given as a tentative statement about the subject's behaviour or personality," hostile statements, and "reflections of their apparent feelings." They reported that "both interpretive statements and minimal social reinforcement had a reinforcing effect on personal references. However, hostile statements and reflections tended to decrease the frequency of personal references."(p.165)

The authors explain these results by suggesting that the decrease in self references observed in the "reflections" treatment "is consistent with Carl Rogers' hypothesis that non-directive psychotherapy allows the individual to become less self centered and more oriented toward others." (p. 166) However, it seems that such an explanation is based on the assumption that a major personality change could be accomplished during a twelve minute conditioning period with subjects who are not particularly motivated towards such a change, when months of intensive treatment with clients who are engaged in the process of personal change are required to effect these consequences in the clinical situation. This kind of assumption is certainly not verified by J. M. Rogers (1960) who reported that no changes in self concept occurred following a similarly brief conditioning period.

If we assume, however, that the marked similarity of the response curves of the hostile statements and the reflective statements groups indicated that a somehow similar message was received by the subjects of these groups, we are led to an examination of the interaction between the experimenter and the subject. The parameters of the design require the experimenter to "reflect" affective material following each use of a personal pronoun, regardless of the content of

the statement or the interviewer's ability to uncover affective material. The interviewer is thus obliged to reflect the subjects' "apparent feelings" even when no emotional content is apparent to him, and this may have had the effect of bewildering or confusing the subject, causing him to avoid the responses which occasioned such situations. We are led to the belief that the meaning and context of an intervention, including particularities of the reinforcer and response class and the effectiveness with which messages are communicated play a substantial role in determining its effectiveness as a reinforcing event.

This conclusion seems to be supported by Hekmat's (1971) investigation of the reinforcing properties of reflections and interpretations on affective self-references. He defined the critical response class as "'any statement describing or evaluating the state (other than intellectual or physiological) of S by himself'" (p. 128) and recorded the frequency of affective self-references verbalized by the subjects in response to a series of 70 photographs. Hekmat reports that "groups reinforced with reflections conditioned significantly more effectively than those reinforced with interpretations." (p. 28)

It seems that, in some manner, the response class

identified by Hekmat was more susceptible to modification by affective reflection and less easily influenced by interpretive statements than that used in the experiment by Adams and Frye (1964). A possible explanation for this phenomenon is advanced by Meerbaum and Southwell (1965), who studied the effects of paraphrasing statements, "echoic" statements which consisted of a repetition of the subjects' response, and interpretive statements on the frequency of the subjects' self-referred affective responses. The authors hypothesized that "experimental interventions in the verbal conditioning experiment can be conceived of mainly as discriminative stimuli which set the occasion for the emission of previously reinforced learned verbal behaviour. Thus, the paraphrase, by introducing variations in affective content, should provide clear cut external cues of related verbal responses by the subject. The echoic response, by providing a less discriminative external cue, should restrict the range of the subjects' associative responding in comparison to the paraphrase treatment." (pp. 180-181)

Their experimental procedure was to interview medical students about their feelings toward their patients and their experiences during a psychiatric residency. During the conditioning phase of the interview, the experimenter

intervened with either an affective paraphrase or an echoic statement following the emission of an affective self-referred word or phrase. In a third group, the experimenter delivered a standard number of mild interpretive statements following arbitrarily selected personally referred non-affect statements.

Predictions based on the assumptions made by the authors about the nature of processes involved in the verbal conditioning interview seem to have been confirmed by their results. The paraphrase group showed significantly higher rates of responding than any of the others, and it was the only group which demonstrated a significant increase in self-referred affective responses over operant levels, although the echoic group showed a non-significant increase in this regard. The group which received interpretive interventions exhibited a steady decrease in the frequency of affective statements throughout the interview, although it was the only group to show an increase in non-affective self references. Thus, it appears that the kind of information which is contributed to the interview by the experimenter has a demonstrable effect on the kind of information he receives in return from the interviewee.

An important question presented by this research con-

cerns the interpersonal interactions which account for the changes in behaviour which have been observed. Why does a certain message communicated by an interviewer affect the verbalizations of the subject at all, and what determines the nature of the effect? Harry Stack Sullivan (1954) has stressed the importance of understanding the system of reciprocal motivations and expectations which integrates the persons involved in the interview situation, and since the events which he studied and which concern us occur only in interpersonal contexts, it seems that an exploration of the character of the relationship between interviewer and subject may clarify some of the variables which influence the content of that interaction.

It has been noted by experimenters that certain role-designations for the experimenter have an effect on the verbal behaviour of the subject. Hildum and Brown (1956) suggested that their designation of the experimenter as "someone surveying opinions on general education" influenced the subject's perceptions of the experimenter's attitudes, the meanings they assigned to his verbalizations, and perhaps even their awareness of conditioning in the experiment. Similarly, it can be seen that the basic roles of "interviewer" and "subject" begin to structure the kind of relationship and the

nature of the behavioural exchanges which will occur between persons in these roles. As Haley (1963) presents this:

> If one took all the possible kinds of communicative behavior which two people might interchange, it could be roughly classified into behavior which defines a relationship as symmetrical and behavior which defines a relationship as complementary. A symmetrical relationship is one where two people exchange the same type of behavior. Each person will initiate action, criticize the other, offer advice and so on...
>
> A complementary relationship is one where the two people are exchanging different types of behaviors. One gives and the other receives, one teaches and the other learns... The two people exchange behavior which complements, or fits together. (p. 11)

The experimenter-subject relationship is of the complementary type: one asks about the other, the other talks about himself. Were the experimenter to monopolize the interaction by talking about himself, he would violate a basic assumption for this type of relationship, that the experi-

menter is concerned with eliciting some information from the subject, and will behave toward this end. Haley's observation that "whatever a person communicates to another person is setting the rules for how that person is to behave" seems valid in this context, for as the interviewer, the experimenter can be understood as providing the discriminative stimuli which occasion the subject's responses. The experimenter and subject have certain tasks to perform which are more or less defined as soon as the relationship is established. These tasks relate to the pattern of information exchange which defines an interview - namely, that the experimenter will communicate some "field" within which the subject will attempt to respond. Greenspoon's (1955) instructions, for example, to "Say all the words you can think of" fulfilled this requirement of the experimenter's role.

The question arises as to whether the subject continues to perceive the experimenter's messages as having directive content once past the formal "instruction" phase of the interview, consistent with the complementary character of the interviewer-subject relationship. If this is the case, we might assume that nearly all experimenter behaviours have the potential function of giving a focus to the subject's responses: that is, a command function. A statement by a party-

guest such as "I'm thirsty" would probably bring an offer of refreshment from the host, and could be considered a discriminative stimulus for this behaviour because of the complementary relationship between the host and guest. Similarly, the metacommunication of the interviewer may be an important discriminative stimulus for subject behaviour, given the subject's perception of his own task as one of "providing" what is "requested" by the experimenter.

Skinner (as reported in Matarazzo, Saslow and Pareis, 1960) has suggested that experimenter behaviour serves just this kind of function in verbal conditioning experiments, in that "the response plus the reinforcement act as an S^D indicating that this is the kind of audience that reinforces certain kinds of responses," and that the presentation of an approving remark following a response "may be closer to a green light which serves as a discriminative stimulus for 'more of the same.'" (p. 205) It is clear that the ability of the subject to decode the message "more of the same" from head-nods and the like depends on two important dimensions of the experimenter's verbalization: the evaluative content and, because evaluative words must refer to something else to be meaningful, the context, or contingency of presentation. The subject-experimenter interaction therefore constitutes a

meaningful unit which could allow the subject to discriminate the informational interests of his audience. Through the context of the experimenter's messages of approval, the experimenter exercises the directive function of his role and provides information about when the subject has successfully discriminated and complied with his attempts to focus the interaction.

In a good deal of the verbal conditioning literature, the directive aspects of the experimenter's interventions can be evaluated on the basis of these two variables (context and evaluative content). But in those studies where the interviewer behaviour is more elaborate, the possibility of additional directive material being conveyed through the semantic content of the experimenter's messages increases the opportunity for discrimination of interviewer interests. Meerbaum and Southwell's research (1965) demonstrated that conditioning of affect words was facilitated by interventions which used this variable more effectively, and Hekmat's (1971) results also seem to illustrate the directive effects of the language of the intervention.

Of course, an important variable in any model which attempts to explain interpersonal interactions on the basis of information exchange is the decoding of the message. Ex-

perimenters in verbal conditioning have debated whether the subject "hears" anything at all, since claims of learning without awareness seem to imply that very little, if any, actual communication occurs in the interview. However, "awareness" is often assessed on the basis of the subject's ability to state the contingencies of reinforcement or the formal purpose of the experiment, and this operational definition of awareness is too narrow to give a complete picture. Meerbaum and Southwell found that, although none of their subjects could articulate the relationship between their behaviour and that of the interviewer, "80% of Ss in the paraphrase group indicated that the expression of feelings or emotional reactions constituted the main purpose of the interview." (p.184-185) Additionally, these subjects remembered significantly more affective statements than any other group. Clearly, the subjects in this research attended to the content of their interaction with the experimenter more than to the contingencies of reinforcement, and this type of awareness occurred most frequently in the experimental group which had access to the greatest variety of affective material from the experimenter and thus the greatest opportunity to identify this as the intended focus of the interview. That this group alone showed conditioning further supports the importance of this manner

of communicating information in the modification of verbal behaviour.

Further illustration of the need for a broader definition of "awareness" is found in the work of Matarazzo, Saslow and Paries (1960). They discriminated four "levels of awareness" and found that the subjects who showed only a partial awareness of the contingencies of reinforcement still conditioned in much greater proportions than those who could not demonstrate any awareness of experimental purpose. The standard definition of awareness would not have discerned the relationship between the subjects' attention to the interaction of the interview and conditioning. It appears that the subjects' verbalizations were related to his ability to attend to and decode the directive aspects of the information given by the experimenter during the interview. This conclusion seems to be further supported by other research (Dulaney, 1962) which suggests that changes in verbal behaviour during "conditioning" experiments is more a function of the subject's ability to identify the correct (or a correlated) response class and his intention to produce that behaviour than of some "automatic strengthening" processes induced by reinforcement. The subject's formation of a "Behavioural Intention" to select the critical response (and the consequent condi-

tioning effect) was also shown to be a function of the degree to which the experimenter's requests for behaviour from the subject identified the correct response class. Thus, once again, we are led to the hypothesis that, if the experimenter can communicate, through direct instruction, contingent reinforcement, or some other type of interaction, a directive message which identifies and requests a particular response, the subject's behaviour will change in the desired direction.

Summary and Hypotheses

The issues raised in this discussion suggest that, through various channels, the interviewer conveys information which the subject uses to discriminate the interests and intentions of his audience and to guide his own behaviours during the interview. These ideas are derived from a body of research which is not generally addressed to this type of model of verbal behaviour. Almost without exception, the interviews have employed the "focusing technique" of contingent experimenter intervention, and although in several cases it has been demonstrated that this alone is not sufficient for conditioning, its necessity is not fully explored in these studies. Neither have questions regarding the strength of the subject's motivation to comply with what we have defined as the directive role of the interviewer been confronted in this research, nor has the problem of awareness been fully

investigated.

It is clear that the validity of this discussion of the possible dynamics of interaction during the course of an interview rests on the empirical verification of a number of hypotheses: first, that the semantic content of the experimenter's statements during the interview functions in such a way as to direct the subject's verbal productions into related content areas, even in the absence of the discriminative and reinforcing effects of contingent reward.

Second, it is hypothesized that motivation of the subject to comply with interviewer direction is a basic quality of the experimenter-subject relationship and that instructions which emphasize the importance of cooperation and compliance will potentiate the directive effects of the experimenter's behaviour toward the subject. This hypothesis is an application of Haley's (1963) discussion of the complementary relationship.

The third hypothesis rests on the model of awareness and behaviour developed by D.E. Dulaney (1962). Although this model recognizes the theoretical possibility that verbal behaviour in the conditioning interview may be determined by the subject's verbal habits, the experimental evidence has suggested that performance is primarily determined by the

Behavioural Intentions (BI) of the subject. Thus, we would expect Behavioural Intentions to be significantly correlated with behaviour. We would also expect to find a strong positive relationship between the subject's conception of the expected or correct response (BH) and his Behavioural Intention. Such a relationship should also be construed as corroborative evidence for the previous hypothesis concerning the subject's motivation toward compliance with the experimenter.

The following research design is intended to test these hypotheses by measuring the frequency of critical response production under conditions in which the semantic content of experimenter statements is either related or unrelated to that of the response class and in which the subject's task of complying with interviewer direction is either stressed or ignored in the experimental instructions. It also attempts to assess the degree to which the subject attends to the content of the experimenter's statements and what relationship exists between the subject's perception of the content and directive value of the experimenter's statements, his formation of behavioural hypotheses and intentions, and his production of critical responses.

Finally, it is hoped that the results of this research

will be able to clarify some of the processes which occur during the course of a clinical interview, but it is acknowledged that this is merely a preliminary investigation into a complex area, without prescriptive intent. As Leonard Krasner (1955, p. 23) has pointed out, "It is not envisioned that psychotherapy will consist of the application of behavioural cues...as a formal, mechanical device to be put on and off like a water tap...But it is felt that there are certain lawful relationships between the behaviours of two people which are basic to any other things which may occur in psychotherapy, and these relationships have yet to be discovered."

Method

Subjects

Twenty adults who were currently receiving outpatient treatment at Ravenswood Hospital Community Mental Health Center served as subjects in this experiment. Subjects had all received diagnoses indicating a non-psychotic, non-organic condition, and had attended at least six treatment sessions at the Mental Health Center. Each had been assessed by his or her therapist as able to sustain adequate levels of verbal production during an interview, and each had been rated by the therapist as either low, high, or average in their ability and willingness to discuss affective or emotionally relevant material in treatment interviews. (See Appendix B) Clients of the Center who met the criteria for participation in the study were asked by their therapists if they were willing to act as subjects in a research project being conducted at the Center. They were assured that their treatment would be unaffected by their decision and that their participation would be kept entirely confidential. Clients were also told that the purpose of the research is to discover more about the process of psychotherapy and that participation will involve being interviewed by another therapist for about an hour. A total of 35 patients volunteered to participate in the research.

Subjects agreeing to be interviewed were contacted by the researcher to arrange the appointment and to answer questions which may have arisen. After the sample was larger than twenty-five, subjects were matched in groups of four according to their therapist's assessment of their typical affective production levels and then randomly assigned to groups. Four subjects were interviewed in a pilot study.

As might be expected, the majority of volunteers were rated "Average" in their ability to talk about affective material, and it became difficult to replace "High" and "Low" rated volunteers who dropped out of the research with others who were similarly rated. Where necessary, "Average" rated subjects were chosen at random to substitute for subjects rated at the extremes. The final sample consisted of seven subjects rated "High", eleven rated "Average" and two rated "Low."

Interviewers

Three graduate students interning at the Mental Health Center interviewed the subjects. Interviewers had all received extensive training in empathic listening skills as part of their training at the Center. Additionally, interviewers were instructed in the procedures of the experiment and given opportunity to practice the experimental procedures before

meeting with the subjects. Training procedures are described in Appendix C.

Definition of Dependent Variable

The critical response class consists of self-referred affect words, which has been defined as "any word directly referring to or identifying a personally relevant emotional experience or state." (Meerbaum and Southwell, 1965, p. 181) This response class consisted primarily of the names of feelings or emotions attributed by subjects to themselves, such as "I felt scared," "I was glad," etc., although phrases which clearly indicated an emotional state, such as "I felt bad about that" were also included. Extended similies ("It was like I was entirely alone") were generally excluded because of the ambiguity of the referrent. Each word which expressed emotional material within a self-referred statement was scored individually, and words of possibly ambiguous meaning, such as slang expressions, were counted only if accompanied by clear, non-verbal affective tone. This response class was selected to facilitate comparison with the relevant literature and to study the modifiability of behaviour which is relevant to the clinical interview.

Procedure

Instructions. Subjects were met by the interviewer

in the waiting room of the clinic and escorted to the interviewing room. The first phase of the procedure was the instructions treatment, in which the experimenter verbally presented the appropriate instructive statements. Two sets of instructions were used. One stressed the importance of cooperating and complying with the directions of the interviewer. Subjects receiving these instructions were considered to be "task-informed" (TI). The other set (NTI group) simply described the interview procedure to the subject. The use of this variable is intended to create the conditions for assessing both the natural strength of the subject's motivation toward compliance with the interviewer and the possibility of enhancing this factor. The fact that the intended focus of the interview is on affective verbalizations was not referred to at any point. The text of the instructions for the TI group is presented here:

> Thank you for agreeing to participate in this research. As you know, this interview is not part of your treatment here at the Center, but we hope that your cooperation will help us learn more about the process of psychotherapy. During this interview, I would like to hear about the experiences you've had which have

brought you into treatment here, your relationships with family and friends, and anything that will help us understand the problems you are dealing with. Your cooperation in this discussion is very important. Since I am most interested in hearing from you, I may be silent much of the time, but from time to time I will probably comment on some aspect of what you are saying, and it will be very helpful if you will tell me more about the topics I bring up. At the end of the interview, I will ask you to answer some questions about our discussion. Do you have any questions?

The NTI group instructions were as follows:

This interview is part of a study being conducted here at the Center, but, as you know, it is not a part of your treatment here. We hope that this study will help us learn more about psychotherapy. During this interview, I would like to hear about the experiences you've had which have brought you into treatment here, your relationships with family and friends, and anything that will help us understand the pro-

blems you are dealing with. Since I am most interested in hearing from you, I may be silent much of the time, but from time to time I will probably comment on some aspect of what you are saying. At the end of the interview, I will ask you to answer some questions about our discussion. Do you have any questions?

After the instructions were presented, questions were solicited and answered by paraphrasing the appropriate portion of the instructions whenever possible. The subject was also asked to sign a standard form consenting to participation in the research at this time. (See Appendix D)

Operant Period. The second period of the interview, which lasted ten minutes, began when the interviewer asked, "Why did you seek treatment at the Mental Health Center?" The purpose of this period was to assess the operant level of the dependent variable and the experimenter interacted with the subject only after a period of silence by asking an "interview-continuing question" which either asked the subject to say more about what he had been relating, or focused on a topic of personal relevance to the subject, such as family relationships, some element of personal background, current living situation, or progress in treatment, without

directly requesting affective material in response. These questions were generally open-ended and non-directive in nature.

Acquisition Period. During the third interview period, which was 35 minutes in duration, the interviewer interacted with the subject in an additional way. In the Affect groups (TI-A and NTI-A) the interviewer attempted to verbalize the apparent emotional content of the subject's narration, and his interventions were not to follow the subject's own verbalizations of emotion in any systematic way. This condition was intended to remove the possibility of reinforcing emotional words with contingent attention or approval, and was substantially fulfilled, with only 2.6% of all interventions immediately following self-referred affect statements.

Reflections of apparent affect generally began: "You seem to feel..." or in some other way conveyed a supportive emphasis on the feelings of the subject. Interviewers generally included in the intervention the name of an emotion (angry, sad, etc.) rather than a similic or metaphoric phrase (You feel like you're lost, You seem to feel down in the dumps).

In the Non-Affect groups (TI-NA and NTI-NA) the experimenter's statements were an attempt to de-focus from any

affective material, and may be termed "Mild interpretive statements." These statements focused on some non-affective aspect of the material being discussed by the subject, such as personality traits, cognitive processes, or expectations. The sentence "It seems that you are a person who values honesty" is an example of a mild interpretive statement.

To determine whether interventions occurred at any fixed interval schedule during the interviews, four tapes were selected at random from each treatment condition. Fifteen minutes from the middle of each tape were analyzed to determine the number of nonaffect statements intervening between a self referred affect statement and the next intervention by the experimenter. With the exception of one interview which had a median of 13 intervening statements, median numbers of intervening statements ranged from 2 to 4.5. A Spearman rank-order correlation was performed between these medians and their respective acquisition period scores and the resultant value was not significant, $R = -.60$, $p > .05$, indicating that the position of the intervention in relation to the critical response accounted for only a small part of the variance in critical response rates.

Attempts were made to standardize the number of interpretive or affect-focused statements given per interview at 30 in order to control for the amount of interaction the experimenter has with the subject. For interviews in the

Affect Treatment groups, subjects received an average of 32 interventions; in Non-Affect groups the mean number of interventions was 27. The difference between the mean number of interventions for the two groups was not significant, $t(18) = .79$, $p > .05$. The scoring of this interview period began with the first intervention made by the experimenter.

Awareness. The final part of the experiment involved asking the subject to reply to four sets of questions about the interview. These questions and the instructions given to the experimenter about their delivery are presented in Appendix D. Completion of this section ended the interview.

The awareness measures used in this experiment were adapted from Dulaney (1962). Slight changes were needed in the phrasing and scoring of the questions in order to make them appropriate to the methodology used here. The first two questions were intended to assess the subject's "Reinforcement Hypothesis," or his awareness of the intervention made by the experimenter and his understanding of whether or not the interventions had a directive value. Question #3 focused on the subject's "Behavioural Hypothesis," or his belief about the kind of statements desired by the experimenters and Question #4 addressed his Behavioural Intention, attempting to determine what, if any, response class(es) the subject intended to produce during the interview.

The intended method of evaluating and categorizing responses to the awareness questions is presented here. Response categories for Questions #1 and 2 (which measured the subject's Reinforcement Hypothesis) were:

1. The subject reports occurrence of intervention and reports that its purpose was to direct his verbalizations.
2. The subject correctly describes intervention but reports no directive value.
3. The subject does not report occurrence of intervention, or describes it inaccurately.

Response categories for Questions #3 and 4 (assessing Behavioural Hypotheses and Behavioural Intentions) were:

1. Perfect, positive correlation. The subject identifies critical response class and gives appropriate examples.
2. Partial, positive correlation. The subject identifies response class inaccurately, but gives a self-referred affect statement as an example of the class.
3. No correlation. The subject does not identify any response class.
4. Partial, negative correlation. The subject iden-

tifies response class inaccurately, and does not include self-referred affect statements as examples.

5. Perfect, negative correlation. The subject identifies critical response class as something he believes he should, or intended to, avoid, and gives appropriate examples.

This categorization schema was in part unuseable due to a large number of errors in the delivery of Question #3 and 4. In most cases, the experimenter failed to elicit examples of the response classes the subject intended or believed the experimenter wanted, making it impossible to discriminate between categories 2 and 4 in the scoring of the subject's Behavioural Hypothesis and Behavioural Intention responses. Thus, the only useable categories were:

1. The subject identifies emotions or feelings as the intended response or the response desired by the experimenter.
2. The subject does not identify any response class.
3. The subject identifies some response class other than feelings or emotions as intended or desired by the experimenter.
4. The subject identifies critical response class

as something he believed he should, or intended to, avoid.

Each interview was recorded on a 90-minute cassette tape. In addition to the scoring of tapes by the researcher, an independent judge scored the first ten minutes of each interview for self-referred affect words. Pearson produce-moment correlation coefficients between scores obtained by the two judges were .92 for both Affect and Non-Affect interviews. Neither the subject nor the type of interview was identified on the cassette so that the interviews could be scored as "blind" as possible. The awareness question responses were scored and categorized separately from the rest of the interview, so that scoring of one section could not influence scoring of the other. Additionally, the interviewers were at no time during the running of the experiment informed of the hypotheses of the research or "desired" responses from the subject.

Results

Prior to analysis, the operant and acquisition period scores for each subject were adjusted to express the average number of self-referred affect words per five minute period. This was done in order to equate for differences in response frequency due to the time difference of the interview periods. Table 1 presents this data for each group and each interview period.

Table 1

Mean Number of Critical Responses per Five Minute Period by Subjects in each Experimental Condition

	Interview Period	
Group	Operant	Acquisition
Affect Intervention		
TI Instruction	5.40	6.51
NTI Instruction	4.53	6.53
Non-Affect Intervention		
TI Instruction	2.80	3.0
NTI Instruction	3.94	4.0

It is apparent that the attempt to equate the groups for operant levels of affective verbalizations on the basis of therapist ratings was not effective. It was found, for

example, that the subject who showed the lowest operant level (zero self referred affect words) and the subject who had the highest operant level (19 self referred affect words) had both been described as "High" responders by their therapists. This variability resulted in higher operant period means for the Affect groups than for the Non-Affect groups and it was necessary to control for these initial differences in order to evaluate the effects of the experimental treatments.

An analysis of covariance (Winer, 1972) was performed and is summarized in Table 2.

Table 2

Analysis of the Experimental Sources of Variation in Criterion Scores with Linear Adjustment for the Affect of the Covariate

Source	SS	df	MS	F
A Instructions	0.82	1	0.82	
B Interventions	9.89	1	9.89	6.77*
AB	0.29	1	0.29	
Error	21.90	15	1.46	

*$F(1,15) = 4.54$, $p < .05$

The adjusted criterion mean for subjects in the Affect treatment conditions was 5.90; for subjects receiving Non-

Affect interventions, the adjusted mean was 4.12. The statistically significant *F* ratio for Interventions indicates that the criterion mean for Affect groups was greater than that of Non-Affect groups.

Individual one-tailed *t*-tests for correlated samples (Winer, p. 46) were performed on the operant-acquisition data for both the A groups and the NA groups in order to test the *a priori* hypotheses concerning differences in rates of self-referred affective verbalizations. The statistic for the Affect group was significant, $t(9) = 3.16$, $p<.05$, while for the Non-Affect groups it was not, $t(9) = .45$, $p>.05$. Thus, only in the comparison of the operant and acquisition means of the Affect groups was it possible to conclude that the acquisition period rates of speaking self-referred affect words was greater than operant level rates. Similar statistics were computed with the operant and acquisition scores for each of the "Affect" cells. Results indicated that acquisition period means were greater than operant period means in both groups, $t(4) = 2.32$ and $t(4) = 2.27$, $p<.05$ for both groups.

The correlation between acquisition scores and awareness reports was estimated by the use of Correlation Ratio (Senders, 1958) and this statistic is summarized in Table 3.

Table 3

Correlation Ratio Values

for the Correlation between Criterion Scores

and Awareness Measures

	Reinforcement Hypotheses	Behavioural Hypotheses	Behavioural Intentions	n
Affect Groups	.42	.27	.26	9
Non-Affect Groups	.33	.05	.30	10
All Subjects	--	.12	.39*	19

*$F(2\ 17) = 5.41$, $p < .05$

As shown in this table, correlations were computed between acquisition scores and each awareness variable (Reinforcement Hypothesis, Behavioural Hypothesis, and Behavioural Intention) for each treatment condition. It was also possible to combine the Affect and Non-Affect treatments on the Behavioural Hypothesis and Behavioural Intention measures because these variables were categorized without reference to the type of intervention received by the subject. A significant F ratio of 5.41 ($p < .05$, 2 and 17 df) was obtained for the correlation between Behavioural Intention and acquisition scores of all subjects. This was the only correlation which differed significantly from zero.

To investigate the relationship between Behavioural Intention (BI) and performance, criterion scores were grouped according to the BI category reported by the subject and means for these groups were computed and compared. It was found that the mean number of affect words given during the acquisition period by the subjects reporting an intention to produce affective responses (BI category 1) was 6.43; for subjects reporting a BI category 2 (no intention) the mean was 5.86; for subjects reporting an intention to produce a response class not specifically identified as affective (BI category 3) the mean was 2.48. Differences between these means were assessed with one-tailed t-tests. No significant difference was found between the means for groups BI_1 and BI_2 but the mean for BI_3 was significantly smaller than that of BI_2, $\underline{t}(15) = 3.05$, $p<.05$.

The strength of the relationship between Behavioural Hypothesis and Behavioural Intentions was estimated by the Index of Order Associations (Senders, 1958). For the Affect groups, the value of $\underline{o}$ (-.56) was not significantly different from zero. For the Non-Affect groups, however, $\underline{o} = .71$ was found to be significantly greater than zero, $\underline{z} = 2.66$, $p<.05$.

Supplemental Analysis

To further explore differences in awareness and performance in the two treatment conditions, subjects in each treatment condition were grouped according to their reported Reinforcement Hypothesis and Behavioural Intentions. The mean criterion score for Affect group subjects reporting in RH category 1 were compared with that of subjects reporting in RH category 2 and the resultant value of t was 2.89 ($df = 6$; $p < .05$). A comparison between mean scores of subjects in RH category 1 and RH category 2 in the NA treatment conditions resulted in a non-significant t of .42. Thus, subjects in Affect groups reporting an awareness of the directive value of the experimenter's interventions scored significantly higher on the dependent variable than subjects who reported no directive value to the experimenter's interventions. In the Non-Affect groups, the same comparison revealed no differences in affective verbalizations on the basis of Reinforcement Hypothesis reports.

In regards to Behavioural Intentions, subjects in NA groups who reported a BI in category 3 gave significantly fewer affect words than subjects reporting a category 2 BI $t(8) = 1.86$, $p < .05$, one-tailed. In the Affect treatment groups, no differences in production of self-referred affect

words were found as a result of comparing the scores of subjects reporting in Intention category 1 with scores of subjects reporting in Behavioural Intention category 1, $\underline{t}$ (6) = .55, $p > .05$.

Discussion

Analysis of the data has demonstrated that non-contingent interventions of affective content produced an increase in the production of self referral affect words over the subjects' operant level. This increase in critical response rate was not observed in the Non-Affect treatment conditions. Since these groups were equated for the number of interventions and the number of statements intervening between the critical response and the intervention, it is concluded that the semantic content of the intervention was responsible for the effects observed. Thus, the hypothesis that the semantic content of the experimenter's interventions would direct the verbal productions of the subject into related content areas was confirmed by the data. This result would seem to validate Meerbaum and Southwell's (1965) conclusion that affective interventions made by the interviewer function as a discriminative stimulus which occasions the selection of a related response class by the subject.

The hypothesis that instructions which emphasized cooperation and compliance with the interviewer would increase the effectiveness of the interventions was not confirmed, since the analysis of covariance did not show any significant interaction effects or main effects for the Instructions Variable.

It should be remembered that the instructions were relatively non-specific as to the desired behaviour of the subject and relied on attempting to influence factors which were assumed to be associated with the subjects' motivation to comply with experimenter direction. It may have been illuminating to have included an additional level of the Instructions variable which clearly delineated the role of the subject as one of giving the experimenter the information he was interested in and specified the subject's task as one of discovering the desired response class, and certainly further research which attempts to address the question of role definition in experimental situations should include the study of more direct and concrete specifications of the role and behaviour requested of the subject.

It seems important to note that, although instructions which stressed cooperation did not influence initial response rates, these results do not invalidate our conception of the experimenter-subject interaction as a complementary relationship. The efficacy of the concept is demonstrated by the observation that subjects did respond to the directive aspects of the experimenter's statements. Rather, we have found that the instructions variable in this research did not alter the relationship or augment its effects. As other research has

shown, volunteer subjects tend to demonstrate an orientation toward complying with the "demand characteristics" of the experimental situation (Goldstien, et al, 1972), and this conclusion is supported by this research.

The observation of a significant correlation between Behavioural Intentions and critical response production is consistent with reports (Dulaney, 1962) that this is the only awareness variable to be significantly correlated with performance. This tends to lend support to Dulaney's concept of the subject's behaviour in a conditioning interview as a result of intentional and conscious response selection, but interpretation of this data must be cautious. The high correlation reported by Dulaney between Behavioural Hypotheses and Behavioural Intentions was observed only in the Non-Affect groups in this research. It was found that subjects in NA groups reporting a Behavioural Intention to make non-affect statements did in fact give fewer self-referred affect words during acquisition than subjects reporting no Behavioural Intention, but subjects in Affect groups who reported an intention to talk about their feelings did not differ in response rate from subjects who reported no Behavioural Intention. We have found evidence that the subject forms a concept of the "correct" response and a correlated intention to produce that

response in the Non-Affect treatment groups but no such evidence existed in the Affect treatment groups.

Another difference between these two groups was that subjects who reported an awareness of the directive function of the interventions tended to respond at higher critical response rates than subjects who did not report that the interventions had a directive purpose in the Affect treatment groups. No differences were observed in the response rates of subjects reporting in those categories in the Non-Affect groups.

Thus, it appears that the Non-Affect treatment groups in this research have reproduced the relationships between awareness variables observed by Dulaney and that intentions to produce a Non-Affect response class were associated with lower rates of affective verbalizations. The Affect treatment condition does not show the expected relationship between awareness variables and unexpectedly suggests that the subjects' perception of the purpose of the intervention was related to his performance without evidence of mediating Behavioural Hypotheses or Behavioural Intentions.

It is possible that the affective material presented in the interventions provided a cognitive link between the intervention and the previous affect word or statement and

thus effectively overcame the temporal delay of reinforcement. It should be clear that even this hypothesis relies on a concept of cognitive mediation in the "conditioning" process.

This is to be expected. Verbal behaviour is nothing if it is not meaningful in and of itself. Aside from the intellectual difficulties involved in trying to separate the meaningfulness of human verbal interactions from the lawful nature of the process, the attempts made to assess awareness in this research and in the majority of studies which employed a thorough method of evaluation have shown that <u>some</u> component of awareness is nearly always present in these experiments. When subjects' reports of Behavioural Intentions do not seem to be consistent with observed behaviour, there at least remains a tendency on the part of the subject to identify environmental cues as determinants of behaviour.

Although it is rarely prudent to theorize on the basis of a single experiment, it is possible that the results of this research do not contradict the model that Dulaney has developed for the relationships between awareness and behaviour, but is accounted for in his broader theoretical network. He suggests that, in certain kinds of routine activities, responses of the subject may be more of a function of situational cues than intentional response selection: "We may say

that a habit is manifest when...a response occurs in correlation with cues and unassociated with any correlated instruction or correlated reports." (Dulaney, 1962, p. 109; italics added) Applying this concept to our results, we may suggest that production of self-referred affect words in the Affect groups was a habitual response to the affective content of the cues presented by the interviewer, and that interventions made by the experimenter functioned as cues for those subjects who perceived them as having directive value. This would account for the fact that subjects who reported category 1 Reinforcement Hypothesis tended to produce more affective verbalizations than other subjects.

This line of reasoning raises other related questions. Why would subjects respond habitually to interventions of affective content but intentionally to interventions of non-affective content? Why would this methodology produce results which differ in some respects from those observed by Dulaney? Once again, we can only suggest a possible solution which would have to be demonstrated in further research, but it seems possible that differences in the relationship between behaviour and awareness are related to the fact that interventions occurred contingent on non-affect statements made by the subject.

Thus, in Non-Affect treatment conditions, the subject could form a concept of the "correct" response on the basis of both the content of the intervention and its context. A subject who formed a Behavioural Hypothesis that some broad non-affective response class was correct had a greater chance to observe that interventions occurred as a "consequence" of that behaviour and thus verify his hypothesis. Subjects in Affect treatment conditions could not rely on the role of consequence to provide information about the correct response that was congruent with information provided by the content of the intervention and this may have mediated against the development of correct Behavioural Hypotheses and Behavioural Intentions. In Dulaney's research, the role of consequence always provided information which was consistent with a correct or positively correlated Behavioural Hypothesis.

It is not unreasonable to assume that the control of verbal behaviour is a function of both conscious intention and habit. This research seems to suggest that these determinants interact with each other in a complex way, so that variations in the kinds of information available to the subject as well as variations in conceptual abilities and conditioning histories may result in a number of different processess underlying the behaviours we observe. Some experi-

mental conditions may tend to elicit habitual behaviour because of their familiarity to the subject. It would seem that the conditions of the Affect treatment group most closely approximated the therapeutic interview with which subjects were familiar. Others, like the Taffel procedure used by Dulaney, or perhaps the Non-Affect intervention group in this study, may result in a more cognitively oriented approach to the response selection process because the situations are less familiar to the subject. Some environmental conditions also offer more consistent information about the correct response than others, and one's ability to exercise voluntary and intentional control over verbal behaviour may be dependent on the consistency of the information provided by one's audience.

There are certain to be more precisely defined solutions to the problems presented here. It seems clear that the relationship between awareness and verbal behaviour is not a simplistic one and that the relationships between the environment, awareness and behaviour are equally complex. At this stage in the investigation of the determinants of verbal behaviour it may be most beneficial to articulate what has been observed and to underscore the necessity of further research toward the development of a comprehensive theory.

It appears that introduction of material of specified content into an intervention results in an increased rate of verbalization of related material by the subject. This finding is consistent with the results reported by other authors (Adams and Frye, 1964; Meerbaum and Southwell, 1965; Hekmat, 1971) who have studied the conditioning effects of relatively complex interventions. It also seems that the use of a "reinforcer" which is similar in content to the critical response class tends to diminish the necessity of contingent presentation for the conditioning of the response.

Certain difficulties in assessing whether an intervention functions more as a reinforcing stimulus or a discriminative stimulus are inherent in any "naturalistic" interview situation. This is mainly a result of the fact that there is a continuous, fluid process of interaction which does not lend itself to analysis by trials or other discrete occasions for stimulus presentation or subject behaviour. The final resolution of this problem may depend on the development of a methodology which permits meaningful interaction between interviewer and subject and yet is structured enough to permit a detailed, trial-by-trial analysis.

In the meantime, it seems justifiable to consider that the content of the interventions used in this research

has functioned as a cue for the production of related response classes. This is based on the observation that critical response production varied with the content of the interventions when the delay of reinforcement was relatively controlled.

This and other research (Matarazzo, Saslow and Paries, 1960; Dulaney, 1962; Meerbaum and Southwell, 1965) has shown that the once standard operational definition of awareness as the ability to state the contingencies of reinforcement did not reflect the complexity and subleties of the phenomenon of " awareness." It seems that, in addition to being influenced by environmental conditions, verbal behaviour is also affected by the subjects' perception and understanding of his environment and by his own verbal habits and volitional controls.

The generalization of conclusions about verbal behaviour in the context of the experimenter-subject relationship to that of the client-therapist relationship should be cautious. In many senses, the relationship developed in clinical situations is a good deal more complex, fluid, and intimate than the relationship developed in any experimental situation. The methodology used in this study attempted to compensate for these differences as much as possible.

One clear implication of this research is that the therapist can facilitate the discussion and exploration of

clinically relevant material by interpreting that material to the client. It does not appear necessary to rely on behaviour-shaping techniques to affect the verbalizations of the client, but it may be that the contingent presentation of interventions is a valuable tool in helping the client to interact with the therapist in a cooperative, intentional manner.

The procedure of reflecting or interpreting affective material has been a long established part of the clinician's techniques. This research has suggested a number of hypotheses concerning the psychological and interpersonal processes which may be operative when the therapist interacts with the client in this manner. The questions and ideas raised here should be explored in further research. This experiment is seen as an indication of the possible direction and form of such research, and in addition to suggestions already made about modifications in design and execution, it is recommended that future studies incorporate other changes. A larger total N would be helpful in establishing with greater confidence the behavioural evidence and the relationships between the awareness measures and performance. It may also be helpful to experiment with different ways of asking about the concepts of Reinforcement Hypotheses and Behavioural Hypothe-

ses, since an accurate discrimination of these categories is essential to understanding the processes of communication being investigated.

It also appears important that we remain flexible in the models and concepts of awareness which we develop through future research. New constructs and new formulations of the processes being investigated will certainly become necessary as more and better data emerges. It can only be hoped that further thought and research will evolve ever more reliable and inclusive models of verbal behaviour.

APPENDIX A

Data Summary

	S#	OP	ACQ	RH	BH	BI	Therapist Rating
TI-A	30	9.50	10.00	1	2	2	H
	15	7.00	8.57	2	2	2	A
	14	5.00	7.43	1	2	2	H
	17	2.00	3.43	2	3	2	L
	19	3.50	3.14	2	2	3	A
NTI-A	20	4.50	8.29	1	2	1	A
	3*	8.50	8.00	-	-	-	A
	4	2.17	6.14	1	3	2	A
	12	3.50	5.63	2	2	2	H
	27	4.00	4.57	3	3	1	A
TI-NA	33	8.00	7.42	1	2	2	H
	34	1.50	2.86	1	2	2	A
	24	3.00	2.57	2	3	3	A
	13	0.00	1.57	1	3	3	H
	35	1.50	0.57	1	3	3	L
NTI-NA	31	7.50	7.00	3	3	2	A
	28	3.50	4.43	1	2	3	A
	25	3.59	3.71	2	2	2	H
	29	2.00	2.57	2	2	3	H
	8	3.09	2.29	2	2	2	A

*Awareness information for this S was lost due to mechanical malfunction.

APPENDIX B

Therapist's Rating Scale

Please rate your client's ability to talk about affective or emotionally relevant material in your therapy sessions. Indicate your opinion by circling the appropriate description.

HIGH	AVERAGE	LOW
Talks about emotions more often than usual.	Talks about emotions a moderate amount.	Talks about emotions only rarely.

Client's Current Diagnosis: _____

Modality of Treatment: _____

APPENDIX C

Interviewer Training Procedures

The three graduate student interns who served as interviewers for this research participated in two training sessions prior to their first contact with subjects. Each session was of two hours duration. In addition to these training opportunities, the experimental interviews were monitored by the researcher, errors in procedure were brought to the attention of the interviewers and additional instruction and practice in executing the methodology were provided.

For each training session, the procedure was to explain and discuss the requirements of the interviewer's role, including instruction in the different types of intervention required, the importance of non-contingent presentation, the avoidance of fixed-interval reinforcement schedules, the discrimination of critical responses and the proper presentation of the post-interview questions. Each interviewer was supplied with a list of exemplary affective and non-affective interventions for his own study and reference. In each training session, the interviewers role-played the interview situation and was given immediate feedback by the researcher on the correct and incorrect aspects of their technique. As problems were encountered, the researcher responded by explain-

ing and demonstrating the correct procedure.

The empathic listening skills which each interviewer had developed in the course of his clinical training made the reflection of unverbalized affective experiences an easy task. Perhaps in part because of this training, however, a number of problems in learning the interventions were identified and subsequently corrected in the training. The interviewers had a tendency to make affective interventions which substituted an emotionally descriptive similie for the name of a feeling and also seemed to respond too quickly to affective material in the interview. These habits were dealt with to the point where they rarely occurred during actual interviews. A propensity to reflect affective material in NA treatment conditions was noted, but rehearsal and the exemplary NA interventions which were provided helped the interviewer to correct this problem.

In the training procedure, much time and energy was devoted to the proper method of making interventions, and this effort was successful. The failure of the interviewers to elicit certain information in the awareness assessment would seem to indicate that their training in this area was less than optimal. Clearly, less time was committed to this part of the training, but it was believed that reading a

series of questions to the subject would not be problematic. Thus, interviewers were given an explanation and demonstration of the procedure, but not the opportunity to practice the questions in the training sessions. In retrospect, it is clear that this was a shortcoming in the training regimen, and that, since the interviewers were kept "naive" in regards to the purposes of the post-interview questions the opportunities for rehearsal of this portion of the procedure should have been expanded to compensate for this lack of understanding of the reasons behind each question in the series.

APPENDIX D

Research Consent Form

I understand that I am being asked to participate in a research project being conducted at Ravenswood Hospital Community Mental Health Center. As part of this project, I consent to be interviewed by a staff member and to allow the interview to be tape recorded. I will also complete a questionnaire at the end of the interview.

I am aware that this research is not a part of my therapy and will not affect the treatment I am receiving at the Mental Health Center. All information from tape recordings and questionnaires is strictly confidential and that I will not be personally identified in any way. I understand that, if I so desire, I will be informed of the purposes and results of the research when the project is completed.

Under these conditions, I agree to participate in the research.

_____ _____

Date Signature

APPENDIX E

Post Interview Questions

(Instructions to Interviewers)

General Procedure

At the end of the 45 minute interview period, turn over the tape cassette and begin recording as before (press "Play" and "Record" buttons simultaneously). Tell the subject the following:

> "Now I would like to ask you a few questions about our discussion. Please answer them as fully and completely as you can. Ready?"

Ask the following questions in the order presented below. If you get an affirmative answer to the first question in each series, proceed to the others. The subject should give the kind of information noted in the parenthetical statements following the questions here. This is presented for your use in case the subject misunderstands the questions, but should not be read to the subject.

Questions

1a. "Did you notice whether or not I said anything during the interview?"
b. "What?"
c. "Give some examples of the things I said."

(The subject should describe whatever he noticed and give examples of each type of behaviour.)

For A-type gps: 2a. "Did you come to think there was or wasn't any purpose or significance to my comments about your feelings?"

For NA-type gps: b. "Did you come to think there was or wasn't any purpose or significance to my comments about you?"

both gps: c. "What?"

3a. "Did you come to think that there was anything you were supposed to talk about or not talk about - something I was interested or not interested in hearing about?"
b. "What?"
c. "Give some examples of statements you made about that."

4a. "Would you say that you did or didn't try to talk about any particular topics or experiences?"
b. "What?"
c. "Give some examples of statements you made about that."

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