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ABSTRACT

Emotional expressiveness is generally considered to be an important verbal behavior in the therapeutic interview. The purpose of this research was to examine, within the limits of a low structured, counseling-type situation and under conditions of response contingent and non-contingent reinforcement, the existence of two emotional affect-type response classes. The results suggest that positive emotional affect constitutes a response class within such a situation. In addition, it would appear that experimenters can be taught to attend a specific classes of verbal behavior, to apply reinforcement contingent upon their occurrence, and to exercise a degree of control within an experimental interview. (Author)

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Conditioning Affective Verbalizations  
in an Initial Counseling Interview

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Title:

Conditioning affective verbalizations in an initial counseling interview.

Purpose:

The purpose of this research was to examine, within the limits of a low-structured, counseling type interview and under conditions of response contingent and non-contingent reinforcement, the existence of the following response classes:

1. Positive self-reference emotional affect statements.
2. Negative self-reference emotional affect statements.

Methods and Procedures:

The response classes selected for reinforcement were based on the Gestalts proposed by Peters (1963) and drew upon the research of Salzinger (1958, 1960) and Ullmann (1957). Connotative categories for each response class were first established (Rogot, 1946). Words used by subjects in an initial counseling interview (Pepyne, 1968) were identified via a concordance program (Wightman, Clinch and Coules, 1969) and then placed in an appropriate response category.<sup>1</sup>

Twenty-seven subjects (Ss) were randomly assigned to treatments (T1, T2 & T3) and experimenters (E1, E2 & E3) from a population of freshmen females enrolled in an introductory

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<sup>1</sup>The list of words, in addition to a series of seven rules designed to facilitate immediate and reliable identification of critical response units, is available on request from the author.

psychology course. Three experienced counselors, trained in the recognition of critical response units and in the use of reinforcing verbalizations, served as experimenters.

The interview was divided into five experimental periods. For all Ss, the first, third and fifth periods (P1, P3 & P5) featured non-contingent reinforcement. For the T1 Ss in period two (P2), the E paraphrased the first positive self-reference emotional affect statement occurring in the initial 15 seconds of each minute and delivered a minimal stimulus ("Mm-hmm.") for all additional critical responses. Negative self-reference emotional affect statements were reinforced in period four (P4). The sequence was reversed for the T2 Ss while T3 constituted a yoked control.

Yoking basically involved the conditioning period (P2, P4) reinforcement of a control subject in accordance with a schedule previously established by an experimental subject to whom she had been randomly assigned. Thus, the control subject received the same number of counselor verbalizations at the same time as her experimental counterpart, the difference being that they were delivered non-contingently.

It has been noted that the E's verbalizations included both a phrase and a minimal stimulus. The appropriateness of either reinforcement was determined by color-coded cue lights, operated automatically by the same timing device which identified periods within the interview. Although the E's verbal behavior was rigidly controlled, the compound schedule

of reinforcement (i.e., the fixed interval with a limited hold contingency for the paraphrase and the continuous schedule for the minimal stimulus) was not unlike the naturalistic behavior of a counselor.

The free operant (P1) and extinction periods (P3, P5) were each five minutes in duration. Conditioning periods (P2, P4) were ten minutes in length and were preceded by a flexible interval of from 0 to 5 minutes. The flexible interval technique deviates from the usual practice of beginning conditioning at a particular time in an interview or with a given interview in a series. It maximizes the likelihood of beginning conditioning with a reinforceable response and more accurately replicates the design features of the Skinnerian model. Figure 1 summarizes these methodological considerations.

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Insert Figure 1

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The experiment employed a mixed design with two between- and one within-subjects variables (Myers, 1966). The between-subjects variables included the experimenters and the treatments; the response classes constituted the within-subjects variable.

### Results:

A separate analysis of the data was performed for each of the five experimental periods. Ahe Auld and White

(1956) rules were employed in preparing unitized typescripts from the tape recorded interviews. These units, each basically an independent clause, were then classified according to response categories.<sup>2</sup> The dependent variable was the proportion of critical response class units to the total number of units in a period. Conditioning was defined as a significant difference between the experimental group's production of a reinforced response class and the control group's rate. Extinction was defined as a failure to achieve such a difference.

Analysis of the proportional emission data for the free operant period (P1) did not reveal significant between- or within-subject differences.

Significant treatment by response class and experimenter by response class interactions were discovered in P2. A Dunnett contrast of means (Winer, 1962) revealed that the positive response class had conditioned, and that the level of positive emotional affect was higher across all treatments with E3. Figures 2:a and 2:b illustrate these results.

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Insert Figures 2:a & 2:b

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The significant treatment by response class interaction

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<sup>2</sup>Dr Jules M. Zimmer, now at the University of California at Santa Barbara, has perfected a computerized technique to accomplish each of these laborious tasks.

occurred again in P3 (Figures 3:a and 3:b). Contrasts

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Insert Figures 3:a & 3:b

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suggested that positive self-reference emotional affect statements did not extinguish as a function of withdrawing contingent reinforcement.

In P4, the treatment by response class interaction achieved significance. Although the contrast did not meet the criterion, inspection of graphically presented data (Figures 4:a and 4:b) suggested that the production of positive emotional affect in the contingently reinforced group exceeded that in the control. A tendency within the control group to produce negative emotional affect was also noted.

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Insert Figures 4:a & 4:b

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A significant treatment main effect occurred in the P5 analysis. The T1 group, contingently reinforced for positive self-reference emotional affect statements in P2 and for negative response class units in P4, produced a higher proportion of each type of critical statements than the T2 and T3 Ss (Figure 5).

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Insert Figure 5

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Significance:

The research reported here focused on problems relating to the behavior of clients within an initial, counseling type interview. Its significance is related to three basic features:

1. The attempt to approximate the naturalistic atmosphere of the counseling interview.
2. The relationship of the response classes selected for reinforcement to the client's overall emotional expressiveness.
3. Certain aspects of the experimental design (the yoked control, the flexible interval preceeding conditioning and the use of response classes as a within-subjects variable), which were included to maximize its internal validity.

The results suggest that positive emotional affect constitutes a response class within such an interview. In addition, it would appear that experimenters can be taught to attend to specific classes of verbal behavior, to apply reinforcement contingent upon their occurrence, and to exercise a degree of control within the experimental situation.



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Figure 1. Experimental procedure

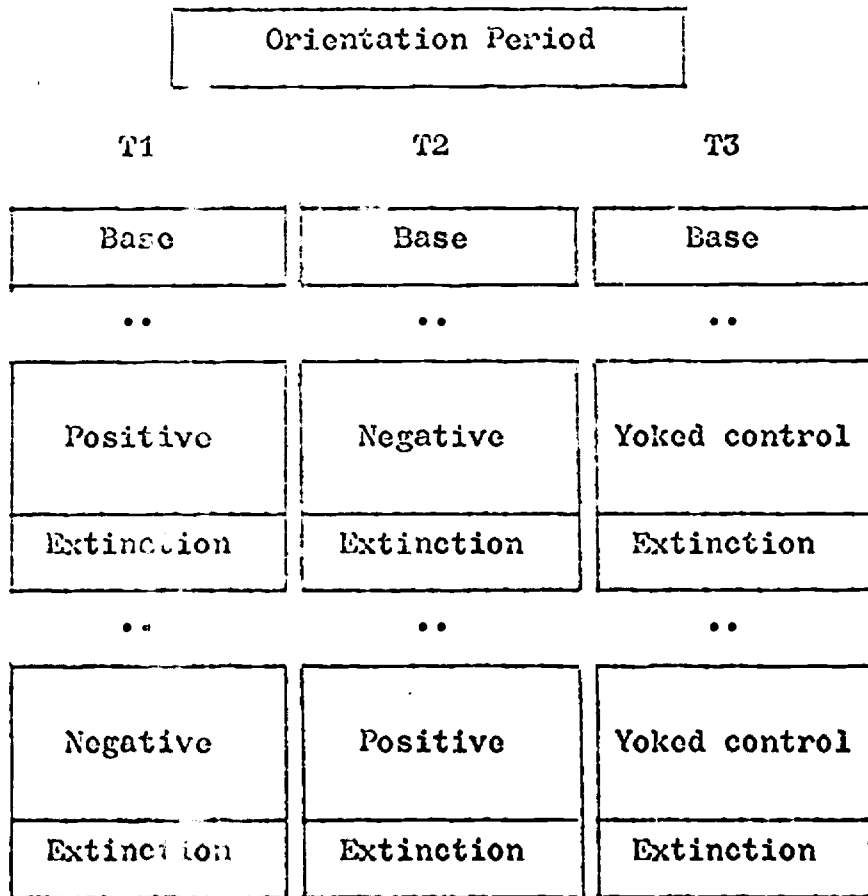


Figure 2:a The average proportional emission of positive self-reference emotional affect statements by treatments and experimenters during the first conditioning period (12).

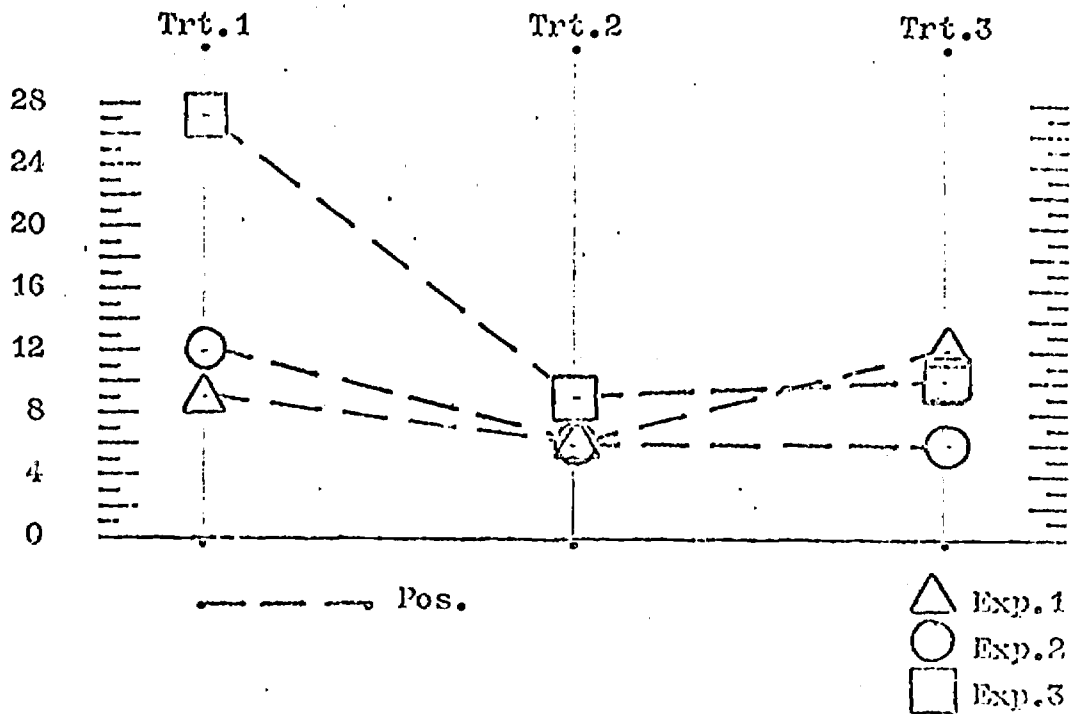


Figure 2:b The average proportional emission of negative self-reference emotional affect statements by treatments and experimenters during the first conditioning period (12).

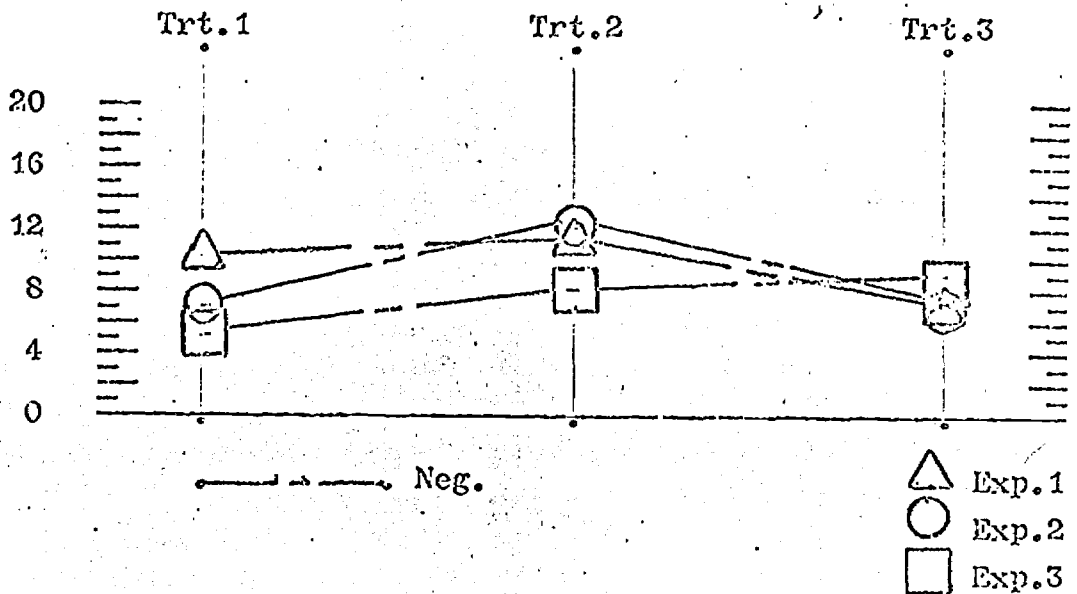


Figure 3:a The average proportional emission of positive self-reference emotional affect statements by treatments and experimenters during the first extinction period (13).

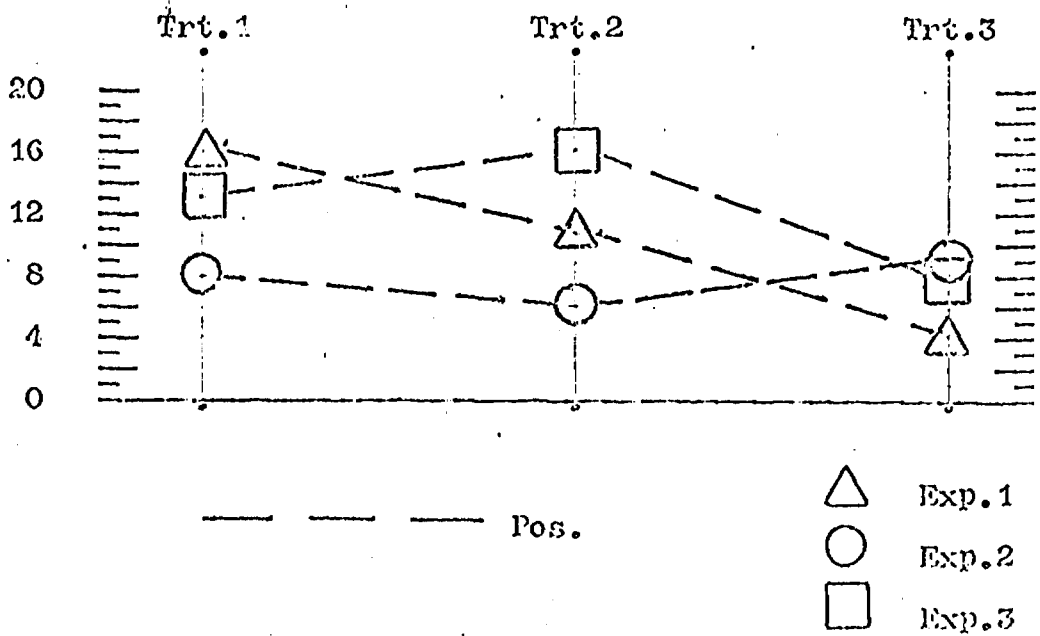


Figure 3:b The average proportional emission of negative self-reference emotional affect statements by treatments and experimenters during the first extinction period (13).

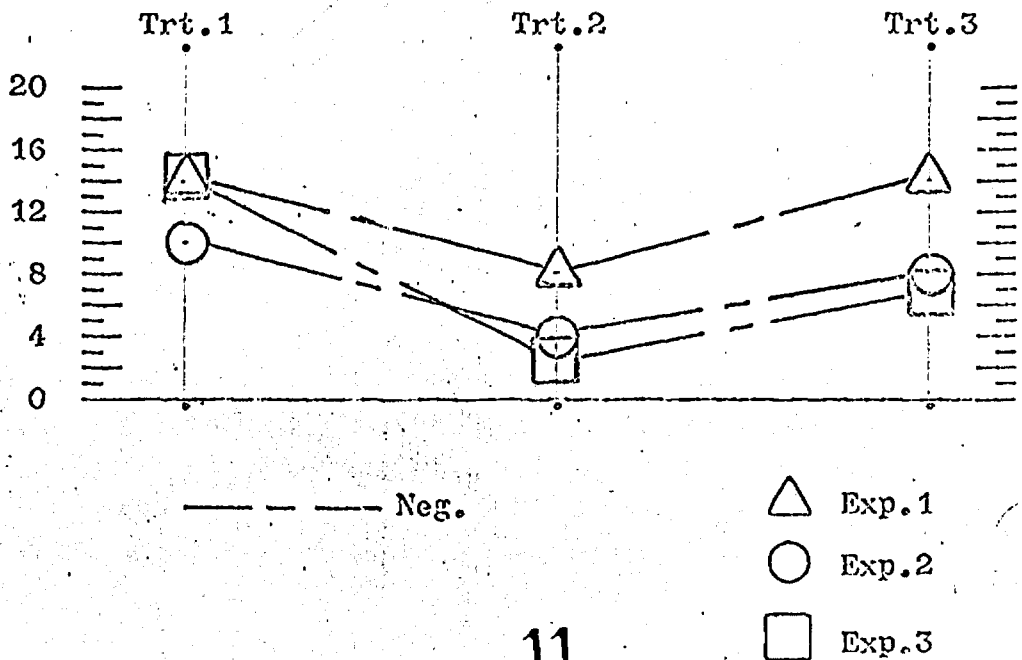


Figure 4:a The average proportional emission of positive self-reference emotional affect statements by treatments and experimenters during the second conditioning period (P4).

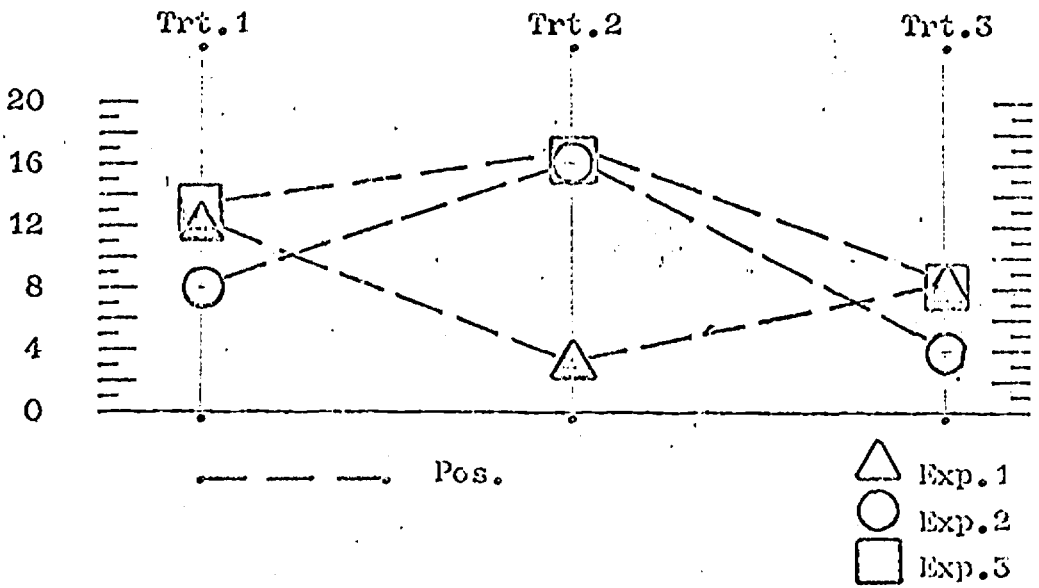


Figure 4:b The average proportional emission of negative self-reference emotional affect statements by treatments and experimenters during the second conditioning period (P4).

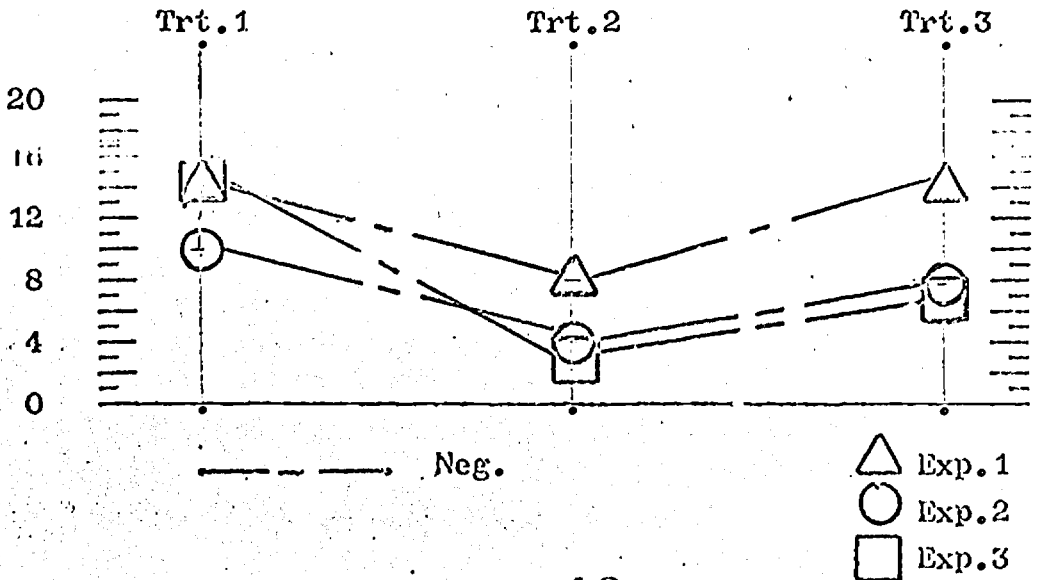


Figure 5. The average proportional emission of positive and negative self-reference emotional affect statements by treatments during the second extinction period (P5).

