Verbal participation in videotape feedback group therapy.

James Gilbert Durfee
University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/theses


This thesis is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
VERBAL PARTICIPATION IN
VIDEOTAPE FEEDBACK GROUP THERAPY

A Thesis Presented
By
James Gilbert Durfee

Submitted to the Graduate School of
the University of Massachusetts
in partial fulfillment of
the requirements for the degree of
MASTER OF SCIENCE

May, 1972
Department of Psychology
VERBAL PARTICIPATION IN
VIDEOTAPE FEEDBACK GROUP THERAPY

A Thesis
By
James Gilbert Durfee

Approved by:

Dr. Norman Simonson, Chairman of Committee
Dr. Sheldon Cashdan, Member
Dr. Alan Lieberman, Member

May, 1972
Acknowledgments

I wish to express my appreciation to the members of my faculty committee, Dr. Norman Simonson, Dr. Sheldon Cashdan, and Dr. Alan Lieberman and to the director of the Alcoholic Rehabilitation Program at the Northampton Veterans Hospital, Dr. William Rohan, for their critical advice and interest throughout the course of this study. Special gratitude is extended to Dr. Norman Simonson, the chairman of the committee, for his suggestions and assistance in the completion of this thesis.

I would also like to thank Miss Frances Noviasky for her tireless assistance in recording and scoring the therapy sessions.
# TABLE OF CONTENTS

Acknowledgments ......................................................... iii
Index of Tables and Figures ........................................... v

I. INTRODUCTION ......................................................... 1
   Current Study ..................................................... 8

II. METHOD .............................................................. 10
   Subjects ............................................................. 10
   Procedure .......................................................... 11
   Data Analysis ..................................................... 12

III. RESULTS ............................................................ 14

IV. DISCUSSION .......................................................... 24

BIBLIOGRAPHY .......................................................... 30
Index of Tables and Figures

Table 1 ................................................................. 15
   Analysis of Variance—Total Speaking Time Data

Table 2 ................................................................. 18
   Analysis of Variance—Average Speech Length Data

Figure 1 ............................................................... 16
   Total Speaking Time

Figure 2 ............................................................... 19
   Average Speech Length

Figure 3 ............................................................... 20
   Questionnaire Responses—Videotape Feedback Group

Figure 4 ............................................................... 21
   Questionnaire Responses—Videotape Observation Group

Figure 5 ............................................................... 22
   Questionnaire Responses—No Viewing Group

Figure 6 ............................................................... 27
   Total Speaking Time (session-by-session)
I. INTRODUCTION

With the recent commercial availability of the television tape recorder has come a great increase in the use of audiovisual feedback in psychotherapy and counseling (Danet, 1968; Alger, 1969). The advantages of television tape over other means of feedback are readily apparent. Recording and playback can be done under normal unobtrusive lighting conditions, and playback can follow recording with a delay of only a few seconds; with sound film, bright studio lighting for recording and a darkened room for playback are required, and a number of days must be allowed between recording and playback for developing the film. The added consideration of cost favors television recording once the original investment in basic equipment has been made, since television tape can be re-used indefinitely if no permanent record is to be kept of recorded sessions, while film can only be used once and costs money to develop for viewing.

Work with television feedback has been done within the counseling environment by Kagan & Krathwohl (1967) and their associates (Kagan, Krathwohl, & Miller, 1963; Kagan, Schauble, Resnikoff, Danish & Krathwohl, 1969; Resnikoff, Kagan, & Schauble, 1970), who have developed the technique of stimulating interpersonal process recall (IPR) with videotape. These four papers describe the techniques and give case examples of videotape IPR, which involves the videotaping of a session between a counselor and client, after which the client and counselor individually review the tape with an objective third
person (the "interrogator"). The client then returns to his counselor for help in making use of the awareness he gained from viewing the tape under the direction of the interrogator. The interrogator helps the client and counselor recall their thoughts and feelings and their characteristic patterns of interaction. The interrogator may also go over the tape with the counselor and client together if he feels it would be beneficial. Patterns looked for in interrogation sessions include fear of rejection or affection from the other and fear of expressing one's own hostility or intimacy. Both the clients and the counselors were found to make repeated distortions of the interaction without videotape IPR, including extreme cases in which the counselor was so wrapped up in planning what he was going to say next that he did not hear at all what the client was saying. Four areas of client behavior were reported as being more improved within videotape IPR therapy sessions than within sessions without videotape IPR:

1. The client owns his discomfort—admits the feeling of discomfort and begins to specify the locus of concern, fears, and discomfort....
2. The client commits himself to change—cooperates rather than resists the efforts designed to change him....
3. The client differentiates stimuli—learns to perceive more and more of the stimuli surrounding him—reacts to these as discrete rather than stereotyped factors....
4. The client behaves differently—reporting new behaviors outside the counseling relationship as well as trying out new behaviors with respect to the counselor. (Resnikoff, Kagan, & Schauble, 1970, pages 109-110; original in italics.)

In general, the aim of television self-confrontation is to provide the patient with an objective, veridical view of himself and then to give him a chance to change his behavior, using the insight gained as a guide to what changes are necessary (Hogan & Alger, 1969). The feeling of competency which such beneficial changes bring yields
a rise in self-image and a movement away from the self-pitying sick role (Pollak, 1969).

Many reports of the use of television tape in actual individual therapy have appeared in the literature. Boyd & Sisney (1967) noted a change toward less pathological self-concept, ideal self-concept, and public self-concept in psychiatric inpatients given videotape self-confrontation. Their controls were patients from different but "identical" wards in the same hospital, leaving some doubt as to the influence of specific ward personnel and programs on their patients. Single cases without controls in which repetitive self-confrontation was said to have contributed to the improvement in a patient were reported by Geertsma & Reivich (1965) in a case of promiscuity and by Gottheil, Backup, & Cornelison (1969) in a case of anorexia nervosa. Moore, Chernell, & West (1965) used 80 psychiatric inpatients, 40 of whom viewed their weekly taped sessions and 40 of whom did not. Of their experimental group, 19 were rated "maximally improved," 13 "improved," and 8 "unchanged," while of their control group 5, 17, and 18 patients respectively fell into those categories. Their results are weakened by the fact that the average length of hospitalization was significantly shorter for the control group, leaving the alternative possibility that the feeling of involvement in one's therapy which watching the tape may have given was responsible for the longer stay and the greater improvement in the experimental group, rather than the television feedback itself.

Paredes, Gottheil, Tausig, & Cornelison (1969) separated female inpatients into three groups, one of which was composed of patients who viewed the videotapes of their own therapy sessions, the second
of which had patients who viewed the videotapes of another patient's therapy session, and the third of which had patients who viewed no tapes. After twelve sessions, the psychiatrists who had conducted the viewing and videotaping sessions evaluated the patients in the first group as most improved, but a test battery administered before and after treatment showed no differences between the groups, all of which showed improvement. In this case, one is not sure whether the difference between the test results and the psychiatrists' ratings is due to lack of sensitivity in the tests or to bias in the raters.

Working with sound film, Paredes, Ludwig, Hassenfeld, & Cornelison (1969) found self-confrontation beneficial in the treatment of alcoholics. They gave hospitalized alcoholics a drink and then filmed them in an interview. The films were viewed one week later, and the authors report that the films served as a useful point of departure for further discussion. No controls were reported in this study or in a similar one using television tape with adolescent drug problems reported by Wilmer (1969). In his work, Wilmer recommends the use of ten-minute interview segments or fifteen-minute monologues done without an interviewer, since much longer sessions would be too much to assimilate in one viewing session ("A new tool...", 1969).

Self-confrontation therapy research is not limited to one-to-one work with individual patients. Television not only shows a person how he acts, it also shows groups of people how they react and interact, both verbally and non-verbally (Canter, 1969). Alger & Hogan (1967, 1969) used television feedback in marital and family therapy to study the multiple channels of interpersonal communication. They point out
the cueing and following which occurs unconsciously within families, and they conclude that the patients whose initial reactions to the television recordings are strongest—whether positive or negative—are the people who eventually show most improvement in self-confrontation therapy (Alger & Hogan, 1967). Bernal (1969) and his associates (Bernal, Duryee, Pruett, & Burns, 1968) used television feedback in modifying the behavior of mothers and their five- and eight-year-old male "brats." The mother-son interaction was taped, and then the mother and therapist went over the recording. They were able to achieve immediate and long-term improvements in the boys' behavior by using the television feedback in training the mothers how to deal with their sons. Kaswan & Love (1969) found that similar parental self-confrontation achieved significantly greater improvement in the grades and school behavior of elementary school problem children than a course of child psychotherapy or parent counseling without television feedback.

Similar feedback has also proved useful in larger group settings. Goldfield & Levy (1968) report that television feedback is ideal for analyzing and reviewing psychodrama. Its use in marathon and encounter groups is discussed by Stoller (1970) and Lawrence (1969). In most group settings, Stoller (1968) advocates the use of "focused feedback." Because the interaction between individuals in a group is so complex, viewing a complete tape of a group session would require the analysis of overwhelming amounts of data. Instead, Stoller chooses important short interactions and presents only them to the group for later analysis. While this editing process does introduce a certain amount of bias into the resulting discussion, Stoller feels that without it
there would be too much input for anything to be accomplished at all. According to Stoller (1967b), the most important thing to focus on is showing people how they react to others and how others react to them. This feedback can be given much more easily by television than by word of mouth, since there is much less transference associated with the television than with the therapist (Stoller, 1969). When the therapist or an observer gives his view of what happened, group members react emotionally to that view depending on their feelings about the therapist or observer (Golner, Geddes, & Arsenian, 1959), whereas when the television tape is played, its view is accepted as objective. Thus, television feedback is seen as enhancing group cohesiveness, mutuality, trust, intimacy, and sharing, and reducing resistance and distancing ("Videotape playback found valuable...", 1968).

Controlled studies of television feedback in group settings are not common. Robinson (1968) found that a group of patients receiving focused television feedback were rated by therapists as showing more adaptive and fewer maladaptive responses than a group receiving only discussion feedback, but the patients did not rate themselves differentially as to how much improved they felt themselves. In her study, the question of the possible lack of objectivity of the expert raters must be raised. Danet (1969a, 1969b) did one study with 14 neurotic or character disordered adolescents, seven of whom were in a group which saw a playback of the previous session at the beginning of each new session and seven of whom were in a group which did not review the recordings made of them. Danet reports that the control group members rated themselves as more improved after therapy than did the television feedback group. He cites these results as indicating
that television feedback can disrupt group functioning and that care should be taken to select for television feedback only patients with sufficient ego strength to withstand the strain of this type of therapy. It should be noted that Danet's subjects were not well matched between groups; he states that the experimental group contained patients who were more hostile initially than the control group patients. Without the proper matching of subjects, any results from this type of study must be considered questionable.

It has been noted by Berger (1970a, 1970b; Berger, Sherman, Spalding, & Westlake, 1968) and Stoller (1967a) that patients' initial reactions to videotape feedback usually deal with matters of physical appearance; only after the participants become more accustomed to seeing their bodies as others see them can the discussion turn to matters concerning interactional patterns. The process of becoming accustomed to the feedback situation may take a few sessions, but according to Rynearson & Wilmer, "When videotaping is going well (when the patient and doctor are adjusted to it), we have noted that the psychotherapy is seldom affected" (1970, page 86). In some cases, the videotaping procedure is reported to stimulate participation by group members, who feel that expensive time and equipment would be wasted if they were silent while being recorded. Czajkoski (1968) felt that group member comments indicated this effect with a group of prison inmates, but he did not find a corresponding decrease in participation once the camera was shut off part way through a session. There was no control group in Czajkoski's study, so there is no way to determine if the videotaping enhanced participation any more than any
other means of therapy administered to a group of inmates singled out for special attention. Bailey & Sowder (1970) pointed out that an increased verbal output might not even indicate that therapy was going well, since exhibitionism and defensiveness could also increase verbal output. In a more controlled study, Hum (1969) found that high school counseling group members receiving focused videotape feedback responded to each other on a significantly lower behavioral level (i.e., less speculative and confrontive and more conventional and assertive, as measured by the Hill Interaction Matrix) than groups not receiving feedback. There was no attempt to analyze session-by-session changes within groups over the ten sessions in this study.

Current Study. There is some pilot evidence (William Rohan, personal communication, 1971) that during the first four to six meetings of a therapy group of hospitalized alcoholics, patients receiving videotape feedback participate less than similar patients in non-feedback groups, but that this difference tends to disappear with further sessions. In the present experiment, that session-by-session trend was investigated more fully. It was hypothesized that due to initial anxiety with viewing their own physical bodies, the videotape feedback group members would show decreased verbal participation at the beginning of the feedback condition. It was further hypothesized that as the participants became more accustomed to seeing themselves on television, their verbal participation would increase gradually until by the twelfth feedback session it would be at least back up to its baseline level. The no viewing group was expected to remain at a fairly constant level of verbal participation throughout, despite the
passage of the same amount of time as in the feedback group. The videotape observation group, which viewed in each observation session the tape made by the videotape feedback group in its corresponding session, was expected to fall somewhere between the other groups on measures of verbal participation.
II. METHOD

Subjects. Three therapy groups of eight patients each were selected from the population of the Alcoholic Rehabilitation Program (ARP) at the Northampton Veterans Hospital. All ARP patients are on voluntary status and carry a psychiatric diagnosis of Episodic Excessive Drinking, Habitual Excessive Drinking, or Alcohol Addiction. Since ARP patients are expected to stay in the hospital for from 30 to 90 days, subjects were chosen from among the newly-arrived patients who had at least five weeks remaining in their expected hospitalization. All three groups were not run simultaneously, since the staggered ARP turnover made it impossible to find 24 patients all of whom would be available during the same five-week period. The first eight subjects available were assigned to the videotape feedback group, and that group’s sessions then began. When eight more subjects became available, the no viewing group’s sessions began, and when a final eight subjects became available, the videotape observation group’s sessions began. Group members were expected to attend every group session, and other hospital appointments were scheduled so as not to conflict with group meetings. Before running the experiment, it was decided that if a subject were to leave the hospital before his group’s sessions were completed, data on his participation would be eliminated from the statistical analysis. Such was the case with two members of the videotape feedback group, who left after their group’s second and fourth experimental sessions, with one member of the no viewing group,
who left after attending the four warmup sessions but before his group began their participation in the experiment, and with one member of the videotape observation group, who left after his group's fourth experimental session. Thus, data were analyzed for a total of twenty subjects.

Procedure. After four warmup sessions, each of the three therapy groups was run for sixteen experimental sessions, one session each afternoon, four afternoons per week, for a total of five weeks. The first 20 minutes and the last 20 minutes of each hour-long session were recorded using an undisguised video camera, controlled by an assistant in the next room. Simultaneously, the assistant viewed the session on a television monitor and recorded the duration of each subject's verbal participation on a Lafayette Model 5040 Multi-Pen Event Recorder. These durations were easily read off in seconds, since the paper was ruled with ten squares to the inch and the paper speed was six inches per minute.

The 16 experimental sessions were divided into a baseline condition (4 sessions) and a manipulation condition (12 sessions). During the warmup and baseline conditions, all groups participated in one-hour non-directive group therapy sessions with the experimenter; there was no viewing of any videotapes during these conditions. During the manipulation condition, the videotape feedback group had sessions divided as follows: 20 minutes therapy, 20 minutes viewing the videotape of the first 20 minutes of that session, 20 minutes therapy. The videotape observation group's manipulation sessions were divided as follows: 20 minutes therapy, 20 minutes viewing the videotape of
the first 20 minutes of the feedback group's corresponding session, 20 minutes therapy; this group controls for the effect of simply viewing a therapy session, rather than viewing oneself. The no viewing group had manipulation sessions identical to their baseline sessions; this group controls for the effect of the passage of time. No attempt was made in the present experiment to control for the possible activating or depressing effect which the mere presence of a functioning television camera may have on verbal participation.

Data Analysis. The basic data analyzed was each group member's total verbal output and average speech length (in seconds) for the first and last 20 minutes of each session. Wiens, Molde, Holman, & Matarazzo (1966) have found that such measures can be taken directly from audiotape recordings; this study improved on that technique by using videotape recordings. Matarazzo & Wiens (1969) have further found that measurements taken using one rater and a simple stopwatch are just as reliable as those using many raters and sophisticated instrumentation such as the Chapple Interaction Chronograph; therefore, after an initial interrater reliability check yielded a reliability coefficient of 0.98, only one rater was used in this experiment. They also noted that word count correlates 0.98 with duration of utterance, the more common measure used in interview research.

The group members were also asked to check off their reactions to each day's session using the following three questions:

(1) How much did you enjoy today's session?
(2) How much do you think you profited from today's session?
(3) How much do you think others profited from your contribution to today's session?

Each question was followed by a forced-choice scale, ranging from
1 (not at all) to 5 (very much).

The verbal output and average speech length data were analyzed using a 3x16x2, one between- and two within-subjects variables, analysis of variance design. Since two of the groups had seven subjects apiece and one group had only six subjects, a least-squares correction for unequal but proportional cell frequencies was used. The questionnaire data were examined to determine if there was any difference in subjective reaction to the various experimental conditions and if that subjective reaction was correlated with verbal participation.
III. RESULTS

The results of the analysis of variance done on the total speaking time data may be found in Table 1. In that table, "groups" refers to the effect of receiving the different treatments administered to the three experimental groups, "sessions" refers to the effect of the passage of time and cumulative group experience over 16 sessions, and "segments" refers to the effect of the first 20-minute segment versus that of the last 20-minute segment within each session. None of the F ratios approached statistical significance, indicating that the within-groups subject variance (error variance) was sufficient to account for the data obtained. The total speaking time data are presented in simplified form in Figure 1, in which the data for the first and last 20-minute segments of each session have been combined and the sessions variable has been collapsed into four blocks of four sessions each. The elimination of the segments variable from this and subsequent figures is justified since no statistically significant segments effect was ever found; in all groups, the session-by-session variations of the data from the first 20 minutes were paralleled by the session-by-session variations of the data from the last 20 minutes. The collapsing of the sessions variable into four-session blocks for graphing makes the trend of the data easier to visualize, but the actual data analysis was done keeping the 16 sessions separate. In Figure 1, an overall downward trend can be seen over sessions in the feedback group, but the error variance makes the confidence bands
Table 1

Analysis of Variance—Total Speaking Time Data

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>d.f.</th>
<th>MS</th>
<th>F*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>groups</td>
<td>2</td>
<td>25,943.48</td>
<td>0.106</td>
</tr>
<tr>
<td>subjects/groups</td>
<td>17</td>
<td>243,977.33</td>
<td></td>
</tr>
<tr>
<td>Within Subjects:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sessions</td>
<td>15</td>
<td>4,044.91</td>
<td>0.187</td>
</tr>
<tr>
<td>groups x sessions</td>
<td>30</td>
<td>5,807.13</td>
<td>0.268</td>
</tr>
<tr>
<td>subjects x sessions/groups</td>
<td>255</td>
<td>21,670.11</td>
<td></td>
</tr>
<tr>
<td>segments</td>
<td>1</td>
<td>3,501.57</td>
<td>0.246</td>
</tr>
<tr>
<td>groups x segments</td>
<td>2</td>
<td>7,741.38</td>
<td>0.543</td>
</tr>
<tr>
<td>subjects x segments/groups</td>
<td>17</td>
<td>14,255.28</td>
<td></td>
</tr>
<tr>
<td>sessions x segments</td>
<td>15</td>
<td>1,889.91</td>
<td>0.138</td>
</tr>
<tr>
<td>groups x sessions x segments</td>
<td>30</td>
<td>1,135.37</td>
<td>0.083</td>
</tr>
<tr>
<td>subjects x sessions x segments/groups</td>
<td>255</td>
<td>13,702.84</td>
<td></td>
</tr>
</tbody>
</table>

*no F values statistically significant
Figure 1: Total Speaking Time

- Solid line: Videotape Observation Group
- Dashed line: Videotape Feedback Group
- Dotted line: No Viewing Group

Sessions: 1-4, 5-8, 9-12, 13-16

Time (minutes): 35, 30, 25, 20, 15, 10
around the lines in that graph so wide as to preclude statistical significance of any of the tested effects.

The results of the analysis of variance done on the average speech length data may be found in Table 2. With these data, two effects were statistically significant: the sessions effect (F=1.752, d.f.=15 and 255, p<0.05) and the groups by sessions interaction effect (F=1.726, d.f.=30 and 255, p<0.05). The average speech length data are presented in simplified form in Figure 2, in which the segments variable has been eliminated and the sessions variable collapsed into four-session blocks. The within-groups subject variance (error variance) is much smaller for these data than for the total speaking time data; it is not sufficient to account for all the average speech length results obtained. It can be seen from Figure 2 that the overall downward trend across sessions in average speech length is due in large part to the fact that the videotape feedback group had a much higher baseline average speech length than did either of the two control groups.

Average questionnaire responses are presented for the three groups in Figures 3, 4, and 5. No significant differences were noted between groups or sessions for these responses, although there was a pattern maintained for questionnaire responses within groups. Peaks and valleys on the graph of one question were almost invariably paralleled by similar peaks and valleys on the graphs of the other questions within the same group, with the first question ("How much did you enjoy today's session?") receiving the highest rating, the third question ("How much do you think others profited from your contribution..."
<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>d.f.</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Subjects:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>groups</td>
<td>2</td>
<td>36.81</td>
<td>0.398</td>
</tr>
<tr>
<td>subjects/groups</td>
<td>17</td>
<td>92.59</td>
<td></td>
</tr>
<tr>
<td><strong>Within Subjects:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sessions</td>
<td>15</td>
<td>16.71</td>
<td>1.752 *</td>
</tr>
<tr>
<td>groups x sessions</td>
<td>30</td>
<td>16.47</td>
<td>1.726 *</td>
</tr>
<tr>
<td>subjects x sessions/groups</td>
<td>255</td>
<td>9.54</td>
<td></td>
</tr>
<tr>
<td>segments</td>
<td>1</td>
<td>7.06</td>
<td>0.800</td>
</tr>
<tr>
<td>groups x segments</td>
<td>2</td>
<td>13.35</td>
<td>1.514</td>
</tr>
<tr>
<td>subjects x segments/groups</td>
<td>17</td>
<td>8.82</td>
<td></td>
</tr>
<tr>
<td>sessions x segments</td>
<td>15</td>
<td>6.51</td>
<td>1.098</td>
</tr>
<tr>
<td>groups x sessions x segments</td>
<td>30</td>
<td>4.57</td>
<td>0.771</td>
</tr>
<tr>
<td>subjects x sessions x segments/groups</td>
<td>255</td>
<td>5.93</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05
FIGURE 2

Average Speech Length
FIGURE 3

Questionnaire Responses--Videotape Feedback Group
FIGURE 4

Questionnaire Responses—Videotape Observation Group

"more than usual"

"about average"

"less than usual"

Sessions

1 - 4
5 - 8
9 - 12
13 - 16

Question #1
Question #2
Question #3
FIGURE 5

Questionaire Responses--No Viewing Group
to today's session?" receiving the lowest rating, and the second question ("How much do you think you profited from today's session?") receiving an intermediate rating.
IV. DISCUSSION

Had the trend in the total speaking time data been statistically significant, it would have partially confirmed the stated hypotheses of the current study. The decrease in verbal participation predicted for the initial feedback sessions did occur. Instead of disappearing with further sessions, however, that decrease actually intensified with further feedback. This result brings to mind Danet's (1969a, 1969b) findings in which he described videotape feedback as potentially disruptive to group functioning. Since no qualitative measures of the level of group interaction were made in the present study, it would be going beyond the data to conclude that in this instance the group functioning was qualitatively disrupted. Nevertheless, there was a trend toward quantitative inhibition of verbal behavior in the feedback group.

The trend toward inhibition of talk under feedback conditions can be fit into the body of knowledge on the effect of situational stress on verbal behavior, as reviewed recently by Murray (1971). Murray takes the step of calling situational stress a form of anxiety arousal and attributes the effects of stress to anxiety within the subjects. "Anxiety" is too multi-definitional to be used safely without placing many restrictions on its use, but the stimulus conditions of the various conditions used to produce "situational stress" are specific enough to be meaningful. In all the stress experiments reviewed by Murray except one, the stress (which took the form of group disapproval,
the presence of a large audience, stressful topic content, an emotionally cold interviewer, instructions that the experiment was a "test," stimulus deprivation, threat of electric shock, or impending parachute jumps), verbal participation was less than for control groups without corresponding stressful situations. The one study in which increased verbalization was noted under stress involved the presence of an audio tape recorder (without feedback) versus therapist note-taking in a standard TAT administration. Murray postulates an inverted-U shaped curve of verbalization under stress, with moderate stress increasing verbal output and severe stress decreasing verbal output. The studies reviewed by Murray all involve only one stressful session per subject, so he makes no generalization on possible cumulative effects or habituation due to repeated stress. While no clear measures of subject "anxiety" were collected in the current study, there were some stimulus elements which the feedback situation had in common with the stressful situations reviewed by Murray. The focus of discussion after feedback often turned to individual criticism, making feedback sessions similar to the situational stress conditions involving group disapproval. While it might be possible to become habituated after a number of trials to the stress of speaking before a neutral audience, a disapproving group would tend to represent a more continual stress. Under such circumstances of repeated stress, a cumulative inhibitory effect might be possible.

The hypothesis that the verbal participation of the feedback group would return to its baseline rate after four to six feedback sessions, as indicated by pilot research, was not confirmed in the
current study. Figure 6 shows the session-by-session changes in total speaking time for the three groups, with data for the first and last 20-minute segments of each session combined. As can be seen in that figure, there was a nonsignificant upward turn in the feedback group's total speaking time in the third to fifth feedback sessions, but that small rise was followed by a larger decline in the following feedback sessions. The current study was run for more sessions than the pilot research; the upturn noted in the pilot data may have been a nonsignificant temporary effect similar to that noted in the third to fifth feedback sessions of the current study. The fact that two different therapists were used in the two pilot groups makes the effect of feedback in that research impossible to isolate.

The two statistically significant effects noted in the average speech length data, that of the passage of sessions and the interaction between the groups and the passage of sessions, cannot be adequately explained in terms of a differential effect of feedback versus observation or no viewing, due to insufficient experimental controls. Figure 2, which presents these data in simplified form, shows that a large portion of both significant effects was due to differences among the three groups on their baseline average speech length values. The baseline average speech length of the feedback group was almost twice that of the other two groups, a difference which disappeared during the differential manipulation phase of the experiment. In order to attribute the significant effects found to differential manipulation of the groups, there would have had to have been no differences in baseline average speech length, followed by differences
FIGURE 6
Total Speaking Time
(session-by-session)
among groups in average speech length during differential manipulation. Thus, it cannot be concluded from these data what the differential effect attributable to videotape feedback was, if indeed there was any such differential effect.

Results noted in the questionnaire data point mainly to a lack of correlation between subjective experience as reported by the subjects in their answers to the three questions and either measure of verbal participation. The only things that the answers to any one question seem related to are the answers to the other two questions for the same group and session. No significant changes in questionnaire ratings were noted, indicating either a lack of sensitivity in the instrument or a real lack of change in the subjects' subjective reactions to the sessions. The experimenter is inclined to believe that the former was the case.

The presence of a clear trend in the total speaking time data without statistical significance leads to the conclusion that a significant feedback effect might be found in further controlled research. Because in the current study the groups were found to differ significantly in baseline average speech length, adequate controls should be provided in this area in further research. It would be essential to have all groups equivalent in baseline average speech length, as determined by a process of prior subject selection. It would be worthwhile even to run separate sets of groups, pre-selected as to high or low baseline average speech length. Thus, there would be three high average speech length groups and three low average speech length groups; the resulting data would be analyzed to determine
not only groups and sessions effects, but also the effect of high versus low baseline average speech length. It would also be worthwhile to run future groups over more sessions than used in the current study, so that if the effect of videotape feedback is actually inhibitory and cumulative over sessions, a larger final inhibitory effect can be expected.

It is also recommended that in future research in this area a therapist unaware of the experimental hypotheses should be used. Although the current experimenter is not aware of any differential elicitation of verbalization on his part brought about by knowledge of the experimental hypotheses, he is aware that such unconscious experimenter effects have been frequently found in other areas in the past. The fact that the three groups in the current study were run consecutively made intergroup comparisons almost impossible for the experimenter-therapist during the course of the experiment before he began his part in the data compilation, but future concurrently-run groups would make such implicit comparisons almost inevitable for a therapist aware of the experimental hypotheses.

Finally, once the effect of videotape feedback on the quantity of verbal participation has been clarified, future research could profitably turn to the area of the effect of such feedback on the quality of group interaction. Many claims have been made for videotape feedback as a therapeutic tool, mostly on the basis of subjective evaluations of biased supporters. Experimental control and objective measurement are extremely difficult in this area, but such an important area must not be ignored simply because of that difficulty.


Danet, B. N. Impact of audio-visual feedback on group psychotherapy. Journal of Consulting and Clinical Psychology, 1969, 33, 632. (b)


Videotape playback found valuable for patients, for training therapists. Roche Report: Frontiers of Hospital Psychiatry, 1968, 5(9), 1-2.

