The Effectiveness of Verbal Versus Activity Groups in Improving Self-Perceptions of Interpersonal Communication Skills

(communication, group processes, occupational therapy, social interaction)

John J. DeCarlo
William C. Mann

This study compares the efficacy of a verbal group with that of an activity group in an occupational therapy clinic during the treatment of interpersonal communication deficits at a psychiatric day treatment center. Outpatients were randomly assigned to the following groups: (a) an experimental group, which received activity therapy ($n = 7$), (b) an experimental group, which received verbal therapy ($n = 6$), and (c) a control group, which was involved exclusively in the normal milieu therapy at the center ($n = 6$). The two experimental groups received one hour of treatment per week for eight weeks. The pretesting and posttesting of interpersonal communication skills were done with the Interpersonal Communication Inventory. The activity group used collages, problem-solving tasks, role-playing sessions, games, and drawing exercises. The verbal group used discussion exclusively. Both the activity and verbal groups were based on whether participants had the following: (a) an adequate self-concept, (b) the ability to be a good listener, (c) the skill of expressing his or her thoughts and ideas clearly, (d) the ability to cope with his or her emotions (particularly with angry feelings) and express them in a constructive way, and (e) a willingness to disclose him- or herself to others freely and truthfully. A significantly higher level of interpersonal communication skills was attained by the activity group. Comparisons between both groups and the control group showed no significant differences.

Psychiatric day treatment patients represent a heterogeneous group, because they have psychoses, neurotic disorders, and personality disorders. Those with the more severe disorders are in remission; they, and the rest of the day treatment center population, are attempting with various levels of success to function outside the hospital setting. The patients' problems vary in etiology and type; however, patients face the common challenge of adjusting to the more difficult demands of the community.

Adjustment to the new demands of increased independence requires a greater interpersonal skill inventory than was required in the hospital setting. One of the inter-

John J. DeCarlo, MS, OTR, is Instructor, and William C. Mann, PhD, OTR, is Associate Professor and Director of Graduate Education; both at the Department of Occupational Therapy, State University of New York at Buffalo, Buffalo, NY 14214. DeCarlo is also a therapist, Buffalo Board of Education, Buffalo, NY 14214.
personal skills needed is communication. Studies have shown that people with psychiatric disorders have a variety of skill deficits in communication (1-9). Other studies have indicated the improvement of communication skills as a normal and desirable aspect of human development (7, 9). The problem that this study addresses is the lack of competence of adult psychiatric outpatients in being able to communicate with others.

Under a variety of conditions, including depression and certain types of schizophrenia, patients frequently withdraw from social situations. This withdrawal curtails their ability to communicate and their overall quality of communication. With diminished communication, the ability to gain self-esteem and increase reality orientation is more difficult.

Occupational therapists who work with psychiatric outpatients often use both verbal and activity groups to improve interpersonal communication skills. There has been little in the literature to suggest which approach, if either, is more effective. This study addresses the effectiveness of these two therapeutic approaches.

Literature Review

Communication Dysfunction

Studies that have focused on communication skills of psychiatric patients have generally hypothesized that there are identifiable differences in patients’ skills, styles, characteristics, or that some communication dysfunction exists that distinguishes these people from the normal population. Most of these studies have focused on schizophrenia, depression, and alcoholism, although some have focused on personality disorders and neuroses.

Hooper et al. (1) examined the communicative nature of depression by examining the dynamics in marriages in which either one or both partners were diagnosed as depressed. They believed that the most striking phenomenon of depression could only be observed in the interactive and communication spheres.

In subsequent research of these communication spheres, specifically in the study of expressiveness of marital partners, Hinchliffe et al. (2) found differences not only between depressed and control groups but also between males and females. Males have more difficulty expressing their feelings of depression. They are unable to confront their partners with open hostility and aggression; thus, they express frustration through the tone of voice. Females maintain a high level of negative expressiveness, tension, and open hostility.

Spouses adapt different roles to overcome depression. Wives of depressed husbands may become more caring and mothering, whereas the husband may become more childlike and dependent. The husband may become ambivalent about his needs. He may find comfort in the security of regression and dependence, but he may experience the discomfort of impoverished self-image and loss of self-esteem. His behavior may confuse his wife because he communicates conflicting needs. Depressed female patients who make an increased demand for support and reassurance from their partners may not have needs met adequately. This leads the female to convey confused messages: she is expressing need while at the same time rejecting. A depressed posture is seen. These findings showed that the wife often retains a high level of hostility after a return to normality (2).

Intervention strategies in depressed couples were directed toward establishing open lines of communication between both partners in which the roles they developed with each other were temporarily disallowed. The therapist interpreted back to the individuals the meaning of their partner’s implicit communications and needs (2).

In a study of responsiveness, Hinchliffe et al. (3) found that:

1. The depressed patient is able to become more responsive to patient-stranger interaction.
2. Males in general are better able to become task oriented than their partners at a time of emotional disturbance.
3. Patient couples are mutually more self-preoccupied than control couples, who are better able to be objective. (p 13)

In studies of disruptions of speech, it was found that disruptions could serve to develop ideas in speech and to be potentially pathological in the retarded speech of depressed people. On one level, there must be a minimum of disruptions for the necessary novelty to be introduced into the conversation. There must also be an absolute limit to the maximum number of disruptions; otherwise, no communication can occur. Contrary to expectation, a large number of disruptions characterize normal communication in the studies cited. We felt that uninterrupted styles of speech acted defensively to screen patients from higher levels of communication. In depressed patients a large number of short pauses indicated retardation of thought rather than an opportunity to introduce new ideas (4).

Nonverbal aspects of depression were studied in an interview situa-
tion by Jones and Pansa (5), who, as do many other investigators, focused on eye contact and gaze. Depressed patients differed from normal control subjects by having (a) a decreased amount of and frequency of smiling during interactions, (b) less looking behavior in most conditions, and (c) a higher level of body contact under all conditions. Other nonverbal behavior exhibited by depressed patients included an increase in frowning and in duration of body movements (5).

There are qualitative differences in communication between normal and schizophrenic subjects. In a study by Blakar, Paulsen, and Solveberg (6), communication skills were compared between the experimental and control subjects when (a) a simple, straightforward problem was presented and (b) a more complex, vague problem was presented. A difference was seen in the latter case. When the situation was more complicated and vague, families containing a schizophrenic member demonstrated a much more inefficient and helpless communication pattern.

Wynne (7) was concerned with the quest of relatedness in families of schizophrenics. His concepts of communication processes were described at three major levels:

1. The specific message of focal content to which shared attention behavior is given in communication.
2. The task in which communicating persons are involved, and
3. The more or less enduring interpersonal relationship which both provides a context for the task and the message and also an intrinsic ingredient in the communication process as a whole. (7, p 397)

Schizophrenic persons doubt their ability to use language to improve interpersonal relationships. They regard sharing language and tasks as empty and meaningless. As a result, they attempt to foster relatedness directly and immediately rather than through tasks. Often these behaviors are inappropriate to the situation (7).

Wynne (7) also discussed some of the characteristics of sociopathic communication. He stated that sociopaths are very skillful in task orientation and focal attention. They are often "slick" in achieving goal-directed tasks. Relatedness is used as a means of achieving particular goals. Relationships are exploited; people are used and then dropped. Interpersonal failures are seen as bad luck or tactics. Sociopathic people do not understand why they are rejected when others come to understand the quality of their participation.

Rime et al. (8) examined the nonverbal behavior of people with psychopathic personalities. These subjects displayed more head gestures and leaned more to reduce the distance between themselves and their partners. They retained eye contact longer and smiled less than people with nonpsychopathic personalities. This retention of eye contact relates to the theory that psychopathic people have an under-responsive autonomic nervous system. Normal control groups experienced increased physiological arousal to gaze and adapted to the unpleasant stimulus by looking away. Because they are stimulus seekers, people with psychopathic personalities miss or ignore many social cues that have important informational or emotional content.

Barbara (9) studied the healthy and neurotic aspects of listening. "The more irrational a person's concept is of himself, the more he will tend to equate words with things, to select indiscriminately, and to project his own confused feelings and emotions in his communications" (p 185). Acknowledgment involves recognition of the fact that a statement has content; however, when abused, it can overstimulate, frustrate, or embarrass the speaker. Unproductive listeners intellectualize and deny their own feelings. Emotional or overanxious listeners are the opposite; they attempt to filter out disturbing or alarming news in a compulsive fashion, thus jamming up the entire communication network.

Mumford (10) examined the effects of verbal and activity groups in the development of interpersonal skills in 24 subjects from an adult education department. One group of 12 subjects performed a wide range of activities; the other 12 subjects engaged in verbal discussion. Mumford used the Fundamental Interpersonal Relations Orientation Behavior Test as a pre- and posttest. The results showed a significant improvement in the interpersonal skills of the activity groups compared with the verbal group.

**Method**

A pretest, posttest, control group experimental design was used to test the following hypotheses: (a) in occupational therapy, groups that are involved in activity therapy will attain a higher perceived level of interpersonal communication skills than groups that are involved in verbal therapy; (b) both groups will attain a higher perceived level of skills than a control group that is involved in the normal milieu therapy at a mental health day treatment center.

**Subjects**

The sample for this study was taken from the Buffalo Veterans Administration Hospital Day Treatment Center. The subjects,
male patients ranging in age from 26 years to 64 years and having primary diagnoses including schizophrenia and depression, were randomly assigned to (a) an experimental group that received activity therapy, (b) an experimental group that received verbal therapy, (c) a control group that was involved exclusively in the normal milieu therapy at the center; that is, they did not participate in goal-directed activities specifically to improve community skills.

Definitions

In this study, the independent variable was type of treatment, and the dependent variable was interpersonal communication skill level. The following definitions were used.

1. **Interpersonal**—according to Schutz (11), this refers to relationships that occur among people. Interpersonal situations lead to behavior in an individual that differs from behavior when that individual is not in the presence of others. An interpersonal situation is one in which two or more persons are involved, with each of these persons taking account of each other for some purpose or decision.

2. **Communication**—the giving, receiving, or exchanging of symbolic cues.

3. **Activity group**—a group of people engaged in meaningful activity to improve skills in communication, such as listening, expressing one’s thoughts and ideas clearly, building an adequate self-concept, being able to cope with one’s emotions and express them in a constructive way, and a willingness to disclose oneself to others truthfully and willingly.

4. **Verbal group**—a group of people engaged in improving the skills in communication through the use of discussion.

Tests

The activity group was composed of seven members; the verbal and control groups each had six members. Each subject was pre-tested to establish a baseline for communication skills by use of Interpersonal Communication Inventory (12), which identifies patterns, characteristics, and styles of communication based on the person’s (a) self-concept, (b) listening skills, (c) ability to express thoughts, ideas, and feelings clearly, (d) willingness to disclose himself or herself to others, and (e) ability to cope with his or her emotions and express them in a meaningful way. A “yes,” “no,” or “sometimes” response was required to 40 questions. Some sample questions follow. Do your words come out the way you would like them to in conversation? When you are asked a question that is not clear, do you ask the person what he means? Normative data were developed for this test (12).

Procedures

The two experimental groups received one hour of treatment per week for eight weeks. Each of the first five sessions concentrated on one of the component skills listed earlier. The last three sessions were directed toward integrating these five skills. The leader of the two experimental groups was a registered occupational therapist who had consistently used both activity and verbal groups in therapy sessions. The primary investigator of this study acted as a cotherapist with both groups.

The activity group sessions were both parallel and project groups, defined as follows. A parallel group is characterized by individuals working or playing in the presence of others, by minimal task sharing, and by mutual stimulation. Necessary behaviors in this group include an awareness of others in the group along with some verbal and non-verbal interaction with fellow group members. A project group is characterized by membership involvement in short-term tasks that require some shared interaction, cooperation, and competition. Perception of the task is paramount. Necessary behaviors in this group include the ability to seek assistance from other members, give assistance willingly and adequately, and show that he or she understands that a person must help others to receive help from others. An inability to perform in this kind of group is indicated by (a) the absence of these behaviors, (b) the tendency to work alone, and (c) fear that others will interfere with task completion (13).

Prior to initiation of each activity, an introduction was provided that described or defined the communication skill or theme of that session. The information was based on the investigator’s finding in the literature and on knowledge of some of the members’ needs and communicative deficits. Following this, the activity was described and then initiated.

Self-concept

Self-concept was the theme of the first activity group. The activity chosen was a magazine picture collage, because of its projective aspects. The group members were given a variety of magazines, white paper, scissors, glue, and pencils. They were directed to look through the magazines then cut out, arrange, and glue pictures in a manner that showed whom they thought they were at the moment. A brief discussion period followed, which allowed each participant to discuss his or her collage and other...
members to comment on it. The activity was primarily a parallel group activity, because each participant worked alone for most of the session.

**Listening**

Listening was the theme of the second activity group. The activity used was a shape-matching task. Two participants sat across from each other at a table, a barrier was placed between them so that they could hear but not see each other. Both were given one blank rectangular sheet of paper and some paper cutouts of circles, squares, rectangles, and triangles in various sizes and colors. One participant was designated as the designer; the other was the copier. The designer was to arrange his or her shapes in any manner, and the copier was instructed to copy his or her design using only the verbal description of the designer. The activity was performed twice. First, the copier was not allowed to ask any questions; the second time he or she could ask whatever he or she needed to know. Two other participants held the barrier that occluded vision; the remaining participants watched. The discussion that followed focused on the influence of the listening skills on the process and outcome of the activity. This was primarily a project group, although only two participants were actively involved. The other participants’ responsibilities were observation and comment.

**Self-disclosure**

Self-disclosure was the theme of the third activity group. The activity used was a coat of arms. In this activity, each subject was given a large sheet of white paper on which he or she was instructed to draw a shield with six compartments. Within each compartment, participants were directed to draw symbols that represented the following:

1. A value or belief from which they would never budge.
2. The greatest success of their life.
3. The thing people could do to help them achieve the greatest happiness.
4. The greatest failure of their life.
5. Three things they want said of them in memory.
6. What they would do if they had a year to live.

The activity was primarily a parallel group. A brief period was allowed at the end of the session for each member to explain his or her symbols. The discussion was directed toward the manner in which each member disclosed self in symbol and explanation.

**Expressiveness**

Expressiveness was the theme of the fourth activity group. Nonverbal behavior was stressed. A simple eye contact game was used to start the group; the normal introduction procedure then followed. At the beginning of this activity, participants were given sheets of paper with specific feelings or attitudes to be portrayed nonverbally. Each participant was given a turn to role-play, whereas the others attempted to guess the feelings or attitude being portrayed. This was a project group.

**Managing Angry Feelings**

Managing angry feelings was the theme of the fifth activity group. An escalation activity was used. Participants were instructed to write down and share with the group a situation that made them angry or that was particularly stressful for them. Through role playing, each participant was subjected to increasingly aggressive “hasslers,” who were the other participants. After each hassler had his or her turn, the participant was given time to talk about his or her feelings if desired. He or she received encouragement and advice from the other group members before the next participant was dealt with. The group leaders intervened to ensure that participants experienced success during the escalation process. A brief discussion followed. This was a project group.

The sixth group was an integrative one in which all five skills were stressed. The activity was a ball game, in which anyone wanting to speak had to hold a ping pong ball. The person holding the ping pong ball had complete control over the leadership of any discussion; the patient surrendered the ball only when he or she was ready and to whomever he or she wished to give it. Those who wanted to speak could only signal for the ball nonverbally. The discussion chosen was one that the veterans felt strongly about—recent budget cuts in the funding of the Veterans’ Administration. At the end of this discussion, group leaders directed the participants to critique the discussion based on who showed outstanding examples of the skills that had been addressed in the previous group sessions. This was also a project group.

The seventh group, also integrative, used headbands to explore role expectations and the effects of those expectations on the five skills. Each participant had a card attached to a headband that defined the way in which each participant was to act toward every other participant. The cards were picked out of a hat; none of the partici-
pants were allowed to see what was written on their own headband. The roles used were boss, comedian, insignificant, helpless, stupid, and expert. An open-ended discussion format was used so that participants could talk about anything they wished. At the end of the discussion, each member was allowed to see his or her headband, and the group reviewed the effects on their communication skills. As in the three previous groups, this was a project group.

In the eighth and final group, a magazine picture collage was used again. The participants were instructed to use the pictures in any way they wanted to represent their feelings and understandings of the communication skills. A brief discussion period followed; the group leaders elicited a review of the eight weeks' work from the participants during the explanations of their collages.

In the first five verbal groups, each of the communication skills was introduced by giving a definition and presenting information on the dynamics of each skill in the communication process. After the introduction, an open discussion followed on the skill which was that group's topic for the session. Each person was encouraged to participate fully by personalizing his or her contributions as much as possible and by using his or her knowledge of the other group members in this response.

In the last three groups, the format in the verbal groups paralleled that in the activity groups. That is, the sixth verbal group also started by reviewing the Veterans' Administration budget cuts. The discussion was then critiqued by the group in terms of the skills and styles of communication used by the individual participants.

The seventh group began with an introduction to role expectations. The participants then discussed how their communication skills were affected by the differing role expectations in and out of the day treatment center.

The last verbal group, like the last activity group, was used by the group participants to review what they had learned about themselves. They spoke about their strengths and noted the areas in which they wanted to improve.

The Interpersonal Communication Inventory was given as the posttest immediately after the final group. A one-way analysis of variance (ANOVA) was used to determine the significance of difference among the three groups for improvement of interpersonal communication skills.

### Results

Table 1 provides a summary of the ANOVA for improvement scores (difference between pretest and posttest) for the three groups. A significant difference ($p = .05$) was found among the three groups.

A Posteriori contrast was carried out to determine which differences in main group improvement were significant, with the least-significant difference analysis at the .05 level. The only significant difference found was between the activity and verbal groups. Results are presented in Table 2.

Table 3 lists the mean scores for each group on the pre- and posttest along with the mean differences between the scores. In the activity group, the posttest group's mean score was 9.2 points higher than

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups (activity, verbal, and control)</td>
<td>2</td>
<td>513.08</td>
<td>3.63*</td>
</tr>
<tr>
<td>Within groups</td>
<td>16</td>
<td>141.47</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*, Significant at $p = .05$.

<table>
<thead>
<tr>
<th>Table 2: A Posteriori Comparison of Activity Treatment Group with Verbal Treatment Group and Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups Compared</td>
</tr>
<tr>
<td>Activity and verbal groups</td>
</tr>
<tr>
<td>Activity and control groups</td>
</tr>
<tr>
<td>Verbal and control groups</td>
</tr>
</tbody>
</table>

*, $p < .05$.

<table>
<thead>
<tr>
<th>Table 3: Group Means and Differences in Improvement of Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Activity group</td>
</tr>
<tr>
<td>Verbal group</td>
</tr>
<tr>
<td>Control group</td>
</tr>
</tbody>
</table>

The American Journal of Occupational Therapy
that of the pretest group. In the verbal group, however, the posttest group’s mean score was 8.5 points lower than that of the pretest group. In the control group, the posttest group’s mean score was .3 point higher than that in the pretest group.

The first hypothesis was supported with significant results; that is, in occupational therapy, groups that were involved in activity therapy attained a higher level of interpersonal communication skills than groups that were involved in verbal therapy.

However, the results did not support the second hypotheses; that is, neither the activity group nor the verbal group performed significantly better than the control group.

Discussion

While most mental health professionals who work with groups use conversation in the process of therapy, occupational therapists have used activities in this process. Verbal groups have also been used by occupational therapists, but there has been little research comparing the effectiveness of approach in the clinical setting. This study examined and compared the effectiveness of verbal and activity groups in improving the self-perceptions of interpersonal communication skills of psychiatric outpatients at a day treatment center setting.

In a comparison between the activity groups and the verbal group, activity therapy was significantly more effective than the verbal therapy in improving self-perceptions of interpersonal communication skills in the occupational therapy clinic. We believe that the activities provided the participants with the experiences necessary to both learn new skills and to recognize them. The confidence the activity group members gained from the experience was reflected in their posttest scores.

The activities provided opportunities for the participants to work through many of their difficulties with interpersonal communication. The activity group operated to provide training, whereas the verbal group may have been more insightful in nature. After actually being presented with the responsibility to practice their communication skills in goal-directed discussion, the members of the verbal group could have felt that their skills were not as good as they previously thought; hence, they had lower posttest scores.

In a comparison of the effectiveness of both activity and verbal groups to the control group, the results were not significant. One limitation in this study, however, was the sample size; a larger sample may have provided different results. The relationship of the scores for the verbal and control groups was the inverse of what was hypothesized, although it was not significantly different. The verbal group may have provided an insight into interpersonal communication skills that the normal milieu therapy at the center did not. The lower posttest scores of the verbal group can also possibly be explained by the ineffectiveness of the group leaders to provide the verbal therapy or by the ineffectiveness of this treatment approach in general. Further research is necessary before conclusions can be reached.

Results of this study support Mumford’s (10) findings. A basic difference in his study and ours is that the treatment sessions in his were not part of an occupational therapy program. The subjects in his study were members of the adult education department of the graduate school of education at Boston University. The subjects for this study were outpatients at a day treatment center; their participation in this study was incorporated into their regular participation in the occupational therapy program. Other differences included the design of the studies and the testing instruments used. Mumford used a pretest-posttest design without a control. Communication was measured by Schutz’s (11) Fundamental Interpersonal Relations Orientation-Behavior Test.

The following are several limitations with the present study that reduce the strength of the conclusions and suggest further research.

1. The influence of the pretest on treatment outcomes was not controlled.

2. The influence of the same or similar treatments applied to the subjects prior to the study on treatment outcomes was not controlled.

3. The environmental influences of the Buffalo Veterans Administration Day Treatment Center may differ in effect from other day treatment center environments. This study represents only one setting.

4. It is not known how well the skills of the therapists performing the treatments correspond to the skill level, quality, and techniques of other occupational therapists who use activity and verbal groups.

5. The sample was not an ideal random sample; that is, it was drawn from only one day treatment center, and the subjects were limited to male veterans.

6. The instrumentation was limited. The Interpersonal Communication Inventory did not give subscores on the five patterns of
communication; it yielded only one score. Because it is a self-report inventory and thus relies on the subjective evaluation of the patient, any generalization about actual improvements in interpersonal communication skills must be avoided.

The findings of this study suggest, rather than provide, conclusive evidence that activity groups are more effective in improving self-perceptions of interpersonal communication skills than are verbal groups during occupational therapy in a psychiatric day treatment center setting. The literature indicates that a lack of interpersonal communication is often a problem that can hinder the development of those with mental health difficulties. While occupational therapy theorists have based their work on the importance of activity, there has been little research to verify their theories. The value of verbal groups is widely accepted by other professional mental health workers; the value of activities is less well understood. Through informal discussion with other professionals, it seems that activities therapy is viewed as a healthy diversion at best rather than something intrinsic to mental health.

The occupational therapy clinic, while it stands in contrast to today's highly technologically oriented health care system, provides a unique and important contribution to patient care. Peer pressure among professionals can adversely affect the occupational therapist's willingness to use the activities that are essential to the patient's therapy. Further research is needed to determine not only if activities are effective but also how and in what situations. The occupational therapist's unique service should remain to provide the patient with a treatment that is both valuable and free from a repetitious overlap of other services.

ACKNOWLEDGMENTS

The authors thank John Bazyk, OTR, who participated in facilitating the research process and in leading the therapy sessions.

REFERENCES