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This study explores the components of cohesiveness in group psychotherapy and the phase-specific nature of these elements. Ratings were performed on 12 time-limited outpatient psychotherapy groups using the Harvard Community Health Plan Group Cohesiveness Scale (GCS) and the Individual Group Member Interpersonal Process Scale (IGIPS). The GCS measures global group cohesiveness and has been found to be associated with outcome. The IGIPS measures statement-by-statement group therapy process dimensions hypothesized to be associated with positive outcome in group treatment. The results demonstrate that various types of observable participant behaviors (e.g., many members having the opportunity to speak during a given session) are related to group cohesion. However, the particular participant behaviors that related to cohesion vary according to the phase of the group therapy. Whereas a specific type of member behavior may be viewed as related to cohesion at a given point in treatment, at other periods of the therapy, no such relationship is found to exist. These findings are consistent with current theories of group development and may inform therapists' decisions about specific interventions that could enhance cohesion at different phases of group therapy.

WHAT IS COHESIVENESS? An Empirical Examination

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Although group cohesiveness is viewed as a central "curative factor" in group treatment (Yalom, 1985), it remains a little under-

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stood and minimally studied phenomenon (Bloch & Crouch, 1985; Drescher, Burlingame, & Fuhrman, 1985). The majority of research efforts that have examined cohesiveness generally use a measure of cohesion that is unsophisticated at best. This measure, which was developed by Gross (1957) over three decades ago and subsequently modified by Yalom (Yalom, Houts, Zimerberg, & Rand, 1967) and Stokes (1983), is a simple patient-rated appraisal indicating group members' subjective impressions of the attractiveness of the group. This and comparable measures of cohesion are usually completed at the time of group termination. Using such instruments, the results relating cohesiveness to outcome have been mixed, with some studies demonstrating a positive relationship (e.g., Yalom et al., 1967) and others (e.g., Roether & Peters, 1972) indicating no such correlates or even negative relationships.

Recently, the Harvard Community Health Plan Mental Health Research Program group therapy study team has taken a new approach to the investigation of cohesion. This team has begun to measure *in process* cohesion as rated by trained clinical observers using videotapes of actual sessions. The scale developed by these researchers, the Harvard Community Health Plan Group Cohesiveness Scale (GCS), appears to be quite promising. In a series of studies (Budman et al., 1987; Budman et al., 1989), Versions 1 and 2 of the GCS have been found to relate to outcome in time-limited (15-session) outpatient therapy groups. These findings have been replicated in two somewhat different (but overlapping) samples of groups, using Versions 1 and 2 of the scale. In addition, undergraduates, graduate students, and trained clinicians have served as raters. Overall, it appears that cohesion as measured by the GCS is related to symptomatic improvement for patients and is analogous to the alliance in individual treatment.

THE CURRENT STUDY

The study reported upon here is an attempt to examine in greater detail what constitutes cohesion. We are interested in moving from the operationalized, but general, descriptions offered by the GCS

to a more clearly and precisely differentiated breakdown of the constituent elements of what raters (and clinicians) are actually observing to be cohesive behavior within the group. To be able to do this, in the present preliminary study we make use of another scale developed by the Harvard group therapy research team. This scale, the Individual Group Member Interpersonal Process Scale (IGIPS), is a measure that also uses videotapes from which process ratings are made. Whereas the GCS makes use of global ratings made on the basis of half-hour segments, the IGIPS raters perform statement-by-statement ratings using videotapes as well as typed transcripts. Soldz, Budman, Davis, and Demby (in press) describe the IGIPS and some of its properties. In the current project, we apply the IGIPS to some of the same clinical material that we have used to study the GCS. In this way, we hope to be able to study the basic elements of cohesiveness and to enhance our understanding of this important component of group treatment.

METHOD

GROUPS

Our sample for this study consisted of 12 time-limited psychotherapy groups with 89 members. Fifty-four of the patients in these groups were females, and 35 were males. Patients were between the ages of 21 and 35 and were screened to exclude those who were psychotic, borderline, suicidal, or homicidal as well as those who were active substance abusers. These patients had sought treatment through the outpatient mental health department of a large health maintenance organization (HMO) in New England. They were mostly depressed or anxious, but generally not suffering debilitating psychopathology. The vast majority were college educated (87.8%) and single (72.2%).

The groups in this study were run in accordance with a model for time-limited group treatment developed by Budman and his colleagues (Budman & Bennett, 1983; Budman, Bennett, & Wisneski, 1980; Budman & Gurman, 1988). This approach, called

an "adult development model" of time-limited group therapy, emphasizes the members' examination of common age-related themes, such as intimacy for young adults. Therapists are encouraged to be active and, generally, to maintain a here-and-now focus. It is also assumed that the group will rapidly come to represent a microcosm of the members' outside-the-group behaviors. However, within the safety of the therapeutic setting, members will be able to identify problematic styles of behavior and test out new, more suitable modes of interaction. The time-limited nature of the treatment and members' reactions to this limit are also explored. All groups were closed (no new members entered after the group began) and led by a single leader. The groups in this study had sessions that were 90 minutes in length. Meetings took place on a weekly basis for 15 weeks.

Therapists were six (three males and three females) staff clinicians at the HMO. Two of the therapists were MDs, two were doctoral-level psychologists, and two were master's-level psychiatric nurses. Each therapist led two groups, with the exception of one who led one and one who led three.

The groups in this study were run as parts of other projects that examined the processes and outcomes of time-limited group treatment. Therefore, all sessions were videotaped, and group members completed an extensive battery of outcome measures administered before and after treatment.

PROCESS MEASURES

Harvard Community Health Plan Group Cohesiveness Scale

The GCS, a process scale used by raters employing videotapes, is designed to measure cohesion in therapy groups. Cohesion, according to the scale, is defined as group connectedness, demonstrated by working together toward a common therapeutic goal, constructive engagement around common themes, and openness to sharing personal material. The scale consists of five subscales and a global scale. The five subscales are (a) Withdrawal and Self-Absorption vs. Interest and Involvement, (b) Mistrust vs. Trust, (c)

Disruption vs. Cooperation, (d) Abusiveness vs. Expressed Caring, and (e) Unfocused vs. Focused. The global scale is called Global Fragmentation vs. Global Cohesiveness. Each scale is defined along a 10-point measure, with one of the extreme characteristics at -5 and the other at +5. There are descriptors and definitions at -5, -3, -1, +1, +3, and +5 along each scale. The rater also has the option of rating a box indicating a lack of evidence for the dimension, an inability to rate the segment, or both. Raters view 30-minute (the first, second, or third 30 minutes of a 90-minute session) videotaped segments shown to them in random order. The GCS scale is more extensively presented in Budman and Gurman (1988).

In previous studies by this research group (Budman et al., 1987; Budman et al., 1989), GCS ratings have been shown to have a significant relationship to outcome in group therapy, as measured by improvement on the Symptom Checklist-90 (SCL-90) (Derogatis, 1977) and the Coopersmith Self-Esteem Inventory (Coopersmith, 1967).

Reliabilities for the GCS have been found to be high. Intraclass correlations for two experienced raters over 25 half-hour sample segments ranged between a high of .85 for the focus subscale to a low of .68 for the trust dimension (Budman et al., 1989).

Individual Group Member Interpersonal Process Scale

The present version of the IGIPS (IGIPS-II) is the result of over 4 years of work. The scale has undergone numerous revisions during this period, has been tested in a variety of pilot studies, and has been used by raters with divergent backgrounds. Our experience with the scale thus far indicates that it possesses great potential for examining the intricacy of therapy group processes.

Items for the IGIPS-II were selected to represent process dimensions hypothesized to be associated with outcome in group therapy. The items were also intended to provide the ability to address a wide range of research questions. The IGIPS-II appears to be "generic," in that it may be used with group therapies of different theoretical orientations. Some examples of the types of items included in the scale are "demonstrates self-awareness," "discloses personal ma-

terial," and "expresses affect." Ratings on these items are performed on each "burst of speech" of more than two words. The ratings record both the presence or absence of the targeted behaviors and their intensity levels. In addition, ratings indicate to whom each statement is referring (self, therapist, group as a whole, or other group member), the locational focus of the statement (life outside the group versus inside the group), and whether the statement was self-initiated or elicited. The length and sequence of all statements are recorded as well. Thus, nested within each item of the IGIPS-II are a variety of other ratings as well. Although the actual number of IGIPS-II items is 21, this procedure of making ratings within ratings allows for literally thousands of formats for aggregating data. For example, we will later describe using data on location focus (inside or outside the group) in our analyses.

The IGIPS-II data are recorded on a statement level. Most analyses can be done by taking the means for a given patient or for the group over a specific length of time, for example, for a particular segment, session, or phase of the group. The scale can also be used to measure the behavior of individual group members, the group as a whole, or the therapist. As the sequence of statements is preserved, it is also possible to examine the relationship between types of interactions, such as those between therapist interventions and patient responses. Transcripts of the sessions are used in conjunction with videotapes to ensure the most exact and efficient execution of the rating process.

Clearly, the IGIPS-II is a multifaceted measure. For this study, however, nine discrete items were initially selected: (a) number of different group member statements (an indication of whether many of the members are speaking or one or two people are monopolizing the group); (b) sentiment quality (based upon the overall emotional tone that the group members express in regard to the therapist, other group members, and the group itself. Positive sentiment is rated in positive direction, and negative sentiment is rated in a negative direction.); (c) demonstrates outside self-awareness (patient shows an awareness of how he or she functions outside the group in regard to feelings, a pattern of behavior, or interpersonal contacts); (d) demonstrates inside self-awareness (same as previous item but in

regard to the group itself); (e) discloses outside personal material (information about one's life or feeling outside the group that would not be discussed in standard social situations); (f) discloses inside personal material (same as prior item, but in regard to the group, leader, or members); (g) discusses self (discusses thoughts, feelings, or issues pertaining to self); (n) discusses other group members (discusses thoughts, feelings, or issues pertaining to other group members); and (i) discusses therapist (discusses thoughts, feelings, or issues pertaining to the therapist of the group). All of these items measure basic dimensions that are relevant to the study of group therapy process and were clinically hypothesized to have a relationship with cohesion. We used these items rather than the full array of items to avoid obtaining a large number of significant correlations simply by chance.

In fifteen 30-minute segments that have been rated by two raters, reliabilities have been promising. When aggregated at the segment level, the mean intraclass correlation of all the items is .80, the median is .85, and the range is from a low of .46 to a high of .94. The intraclass correlations for the dimensions that we will emphasize in our analyses are as follows: number of different group member statements = .94; sentiment quality = .46; demonstrates outside self-awareness = .85; demonstrates inside self-awareness = .70; discloses outside personal material = .91; discloses inside personal material = .59; discusses self = .87; discusses other group members = .76; and discusses therapist = .87.

Throughout its development, the IGIPS has been used in a variety of studies that suggest the existence of a relationship between IGIPS scores and important process and outcome variables. An earlier version of the IGIPS, IGIPS-I, was applied to videotapes of the first four sessions of seven 15-session outpatient therapy groups (52 patients) in the Mental Health Department of a health maintenance organization (Soldz et al., in press). The IGIPS-I was found to have five factors: activity, interpersonal sensitivity, comfort with self, self-focused, and psychologically minded. These factors closely resemble the Big Five factors that have recently been adopted by many personality researchers (e.g., McCrae, 1989; McCrae & Costa, 1989a, 1989b, 1990; Wiggins & Pincus, 1989;

Wiggins & Trapnell, in press). The IGIPS-I at the beginning of the group showed a relationship with pretherapy levels of patient symptomatic distress. For two IGIPS-I dimensions, comfort with self and self-focused, it was found that patient behavior that was moderate on the IGIPS-I dimensions was connected with better outcome than was that of patients with more extreme behavior in either direction. In contrast, for interpersonal sensitivity, the moderate group had worse outcome than did the extremes. Female members were found to exhibit more interpersonal sensitivity than did male group members.

RATERS

The raters for the GCS scale were two experienced master's-level nurse clinicians who had extensive backgrounds in leading short-term therapy groups. They had been thoroughly trained in the use of the GCS and rated several hundred hours of material using the scale. The raters for the IGIPS-II were two graduate students who received about 60 hours of training in the use of this scale.

PROCEDURE

The 39 segments included in this study were specifically selected to represent a wide range of the cohesiveness levels, groups, therapists, phases within the groups (early, middle, and late), and phases within sessions (first 30-minutes, second 30-minutes, and third 30-minutes). In conjunction with a study on the relationship between cohesiveness and outcome (Budman et al., 1989), approximately four hundred fifty 30-minute segments of time-limited 15-session groups were rated by GCS raters. These ratings were categorized according to the group phase (early [Sessions 1-5], middle [Sessions 6-10], and late [Sessions 11-15]), and 13 segments were selected from each of the three phases. These selections were designed to ensure that the widest possible range of cohesiveness levels was represented within each phase and that each phase also contained a relatively equal distribution of different groups, therapists, and session phases. Once the 39 segments to be included in

TABLE 1: Phase-Specific Relationships Between IGIPS-II and Cohesiveness

	<i>Early Group, Sessions 1-5 (N = 13)</i>	<i>Middle Group, Sessions 6-10 (N = 13)</i>	<i>Late Group, Sessions 11-15 (N = 13)</i>	<i>All Sessions, Sessions 1-15 (N = 39)</i>
Number of other group member statements	.55*	.69**	.25	.47**
Sentiment quality	-.01	.77**	.15	.33*
Demonstrates outside self-awareness	.15	-.41	-.22	-.21
Demonstrates inside self-awareness	-.57*	-.17	-.01	-.18
Discloses outside personal material	.62*	.15	.15	.24
Discloses inside personal material	-.22	.20	.36	.19
Discusses self	-.07	-.04	.06	-.02
Discusses other group members	.57*	.49	.42	.45**
Discusses therapist	-.71**	-.11	-.46	-.42**

* $p < .05$; ** $p < .01$.

the study were determined, the segments were transcribed and presented to the IGIPS-II raters in random order. IGIPS-II raters were blind to the characteristics of the segments, including cohesiveness levels and the group and session phase; their ratings were performed using videotapes and transcripts.

RESULTS

When we examine the relationship of GCS cohesion at the three stages of the group (early [Sessions 1-5], middle [Sessions 6-10], and late [Sessions 11-15]) to IGIPS-II rating of these same group sessions we discover a number of theoretically and conceptually interesting relationships (see Table 1).

Early in the group, the correlations between global GCS cohesiveness and the number of different patient statements is significant ($r = .55$; $p < .05$). In the middle of the group, this relationship becomes even stronger ($r = .69$; $p < .01$). Late in the group, there

is no significant relationship between global GCS cohesion and number of patient statements. For all sessions combined, the relationship between number of patient statements and cohesion remains significant ($r = .47$; $p = .002$).

There is a zero-order correlation between sentiment quality and cohesion in the first stage of the group. In the middle phase of the group, the correlation between sentiment quality and cohesion becomes quite strong ($r = .77$; $p < .002$) and significant. In the final phase of treatment, the correlation again becomes low and nonsignificant ($r = .15$; $p = n.s.$). Because of the strong correlation in the middle stage of the group, the overall correlation remains significant ($r = .33$; $p = .04$).

Demonstrates outside self-awareness is not significantly correlated with cohesion during any phase of the group. Demonstrates inside self-awareness has a significant *negative* correlation with cohesion early in the group ($r = -.57$; $p < .05$). During the middle and late phases of the group, the correlations of this variable with cohesion are low and nonsignificant.

Discloses outside personal material has a correlation of .62 ($p < .05$) early in the group's development. In the middle and late phases of the group, the correlation is low and nonsignificant. Discloses inside personal material tends to have a low and nonsignificant relationship with cohesion throughout the group.

Discusses self has a zero-order correlation at all stages of the group with cohesion, whereas discusses other group members is positively related to cohesion throughout the group, but significant only in the beginning stage ($r = .57$; $p < .05$).

The percentage of statements by patients focused upon the therapist early in the group has a significantly negative correlation with GCS cohesion ($r = -.71$; $p = .006$). In the middle of the 15 sessions, there is an approximately zero-order correlation between GCS cohesion and statements about the therapist ($r = -.11$; $p = n.s.$). By the end of the group, the correlation is again stronger, but not nearly as strong as in the first phase ($r = -.46$; $p = .11$). When correlations for all sessions are taken together, the overall correlation of $-.42$ is a strongly significant .009 (because the total number of segments is 39).

An important theoretical question that we were interested in examining was the degree to which discussion of inside-group material versus outside-group material was related to cohesion. Inside-the-group material is viewed as any discussion or communication focused upon what is going on within the group between the participants of the group (e.g., what members feel about one another, how members see things functioning within the group, reactions to the therapist, self-disclosures related to the group, etc.). Outside-the-group material is communication or discussion focused upon life outside the group (e.g., how the patient is doing at work, disclosures about outside relationships, etc.). The distinction between inside and outside is an important one because the model of group therapy that we are studying is one that postulates that the group becomes a microcosm for the patient and that he or she replicates outside problematic behaviors and issues inside the group. It would be of major interest to learn the ways in which discussions of inside and outside material contribute to the overall cohesion of the group. Several of the IGIPS-II items studied highlight the inside-outside distinction (e.g., discloses outside personal material). In total, eight of the items that make up the IGIPS-II are also rated on the inside-outside dimension. We therefore made two combined items from these eight items. The first combined item called percentage of outside-group statements is the number of patient statements referring to matters outside the group divided by the total number of patient statements. The second combined item is called percentage of inside-group statements and is similar to the outside-group combined items. Although the significance levels for these combined items are marginal, the trends are quite interesting. It is our intent to pursue these preliminary findings in later research. As Table 2 indicates, we find that there is a positive trend (at the .08 level) between the number of statements referring to issues and events *outside* the group during the first phase of treatment ($r = .50$; $p < .10$). During the second phase of the group, this relationship is nearly zero ($r = -.08$; $p = n.s.$), and, when the group is in its last five sessions, the relationship becomes negative, although not statistically significant ($r = -.41$; $p = .16$). The correlation for all sessions

TABLE 2: Phase-Specific Relationships Between "Inside-Outside" Combined Items and Cohesiveness

	Early Group, Sessions 1-5 (N = 13)	Middle Group, Sessions 6-10 (N = 13)	Late Group, Sessions 11-15 (N = 13)	All Sessions, Sessions 1-15 (N = 39)
% of Outside Group Statements	.50*	-.08	-.41	-.07
% of Inside Group Statements	-.41	-.05	.45	.08

* $p < .10$.

combined is a zero-order correlation ($r = -.07$; $p = n.s.$). The mirror image of this relationship is found for the relationship between cohesion and percentage of statements referring to issues and events *inside* the group. That is, there is a negative relationship between *inside* group statements in the first phase of treatment ($r = -.41$; $p = .16$), a zero-order correlation in the middle phase of the treatment ($r = -.05$), and a positive but nonsignificant correlation in the final phase of the group ($r = .45$; $p = .12$).

DISCUSSION

Caution should be exercised in the interpretation of these findings, because the sample size is quite small. We consider these data preliminary in nature and can assume that some of the relationships described might change with a larger sample. It is, however, encouraging that, even with a total of 39 segments examined, the results of the study "make sense" clinically and are not counterintuitive. It is our intention in future studies to examine much larger samples of group segments to learn whether the current relationships hold under these circumstances. Even with these caveats, the findings of this study have potential importance for the study of process and outcome in group therapy. This is especially true because the data give us a clearer sense (albeit for a particular type of group and using a specific definition of cohesion) of the components of group cohesiveness. Using this information will allow

clinicians and researchers to be better informed about the types of specific activities and events in the group that are indicative of more or less cohesive interactions. (Because other work by this research team has demonstrated the relationship between cohesiveness and positive therapeutic change, these findings may be viewed as having implications for group therapy outcome as well as process.)

It is important to note that "good" (more cohesive) process in the early stage of the group (first five sessions) appears to be more easily characterized than good cohesion in later stages of the treatment. It may be that our instrument, the IGIPS-II, is insensitive to some of the components of cohesion in later stages or that, as the group proceeds what is considered to be cohesive behavior takes on a much more ideographic flavor with different forms of interaction associated with cohesiveness, depending upon the particular circumstances of a given group.

Cohesive interaction during the earliest stage of the group is characterized by many of the group members' presenting issues about their lives *outside* the group to one another. It is seen as counter cohesive if there is much focus upon the therapist during this early stage. From viewing the videotapes, we have found that a protracted focus upon the therapist during this stage generally indicates that the members are dissatisfied with something about the group or the therapist. Such extensive unhappiness from the start of treatment often portends a problematic course of therapy. It is also favorable during this stage for members to talk about one another by asking questions, making comments, and so on.

In the middle stage (Sessions 6-10) of the group, it becomes even more important that many of the members contribute to the interactions. The focus in the group discussions seems to be in transition during this period. Cohesive groups have discussions about either (or perhaps both) inside- and/or outside-the-group matters. During this phase, there also appears to be no significant relationship between group discussion regarding the therapist and cohesiveness. Either raters of cohesiveness see it as cohesiveness building that members do not discuss the leader during this middle stage, or when these discussions do occur they are accepted as what should be happening during this middle ("group crisis") stage.¹ Sentiment

a global statement about what constitutes cohesion under all circumstances should be considered naive and misleading.

CONCLUSIONS

By examining the elemental components of cohesion, we find that what constitutes cohesive group processes varies according to the phase of the group. What makes for a cohesive group at each of three phases is consistent with current theories about group development. Group cohesion is an area of great importance that has been minimally studied and poorly understood. This project is a preliminary step in the scientific study of group therapy process and outcome. Ultimately, work like this could help to inform us about actions that the therapist could take to enhance the cohesiveness and, subsequently, the outcome of therapy groups. As is true with much of psychotherapy research, a great deal more remains to be done, and the current work must be considered preliminary.

NOTE

1. See Budman and Gurman (1988) for a discussion of the "middle group development." This stage of the group (which they assume occurs at about the 6-8 session of a 15-session group) "is often characterized by a growing sense of uncertainty and frustration on the part of most of the group members. Sometimes described as the 'group crisis' (Yalom, 1985), this phase is critical to the outcome of the short-term group" (p. 276).

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