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The Effect of Group Climate on Outcome in Two Forms of Short-Term Group Therapy

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The authors investigated the association between dimensions of perceived group climate (engagement, avoidance, and conflict) and treatment outcome in 2 forms of short-term group psychotherapy. They were particularly interested in the relationship between early group climate and outcome. They also examined whether average group climate and change in group climate were associated with outcome. Both engagement after Session 4 and engagement averaged over the course of therapy were directly associated with improvement. Significant interactions among the group climate dimensions were also found. These findings support the contention that aspects of the group environment influence patient benefit from psychotherapy groups. Possible explanations and implications of the findings are discussed.

There are many variables that are believed to contribute to the effectiveness of psychotherapy. Most can be classified into two broad categories: specific factors or common factors of therapy (Lambert & Bergin, 1994). Specific factors refer to particular interventions that are part of a treatment model (e.g., transference interpretations in dynamically oriented therapies). Common factors refer to phenomena that are present in virtually all forms of treatment (e.g., catharsis, the presence of a helping relationship, and provision of a different perspective of one's problems). Other common factors that are relatively unique to group treatments are also considered to be potent in the therapeutic process. Examples include social feedback, cohesion, and social learning. There is continuing debate in the psychotherapy field about whether the beneficial effects of psychotherapy are due to the specific ingredients of the treatments or to the factors common to all (or most) therapies (Wampold, 2001). There is growing evidence to suggest that common factors account for much of the positive benefits of psychotherapy (Ahn & Wampold, 2001; Lambert & Bergin, 1994; Wampold, 2001). A lack of treatment differences and the consistent finding of the positive influence of the therapeutic alliance on outcome have most often been provided as evidence to support this contention.

A number of common factors in group psychotherapy have been investigated. These include studies of the therapeutic alliance (Marziali, Munroe-Blum, & McCleary, 1997), cohesion (Budman et al., 1989), and expressed emotion (Castonguay, Pincus, Agras, & Hines, 1998). These and other studies have produced mixed results, possibly because of the considerable variability among their conceptual definitions and operational measures (Bednar & Kaul, 1994). As well, it has been argued that a possibility for the inconsistent findings is that the different common factors have been examined in isolation of other aspects of the group atmosphere (Kivlighan & Lilly, 1997). This suggests that when examining the relationship between the group process and outcome, it is important to consider multiple aspects of the group process.

Some authors have argued that many of the common factors studied in group therapy research are highly interrelated and probably represent only a few underlying dimensions (Sexton, 1993). Instruments have been developed to measure global constructs that incorporate many different common factors. Such measures are appealing because they are not based on a particular theoretical orientation and, thus, are

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applicable to many different group situations. One example of a brief, global process measure is MacKenzie's Group Climate Questionnaire (GCQ; MacKenzie, 1983). The GCQ measures group participants' perceptions of the atmosphere within the group—that is, the group climate. MacKenzie (1983) described the group climate as an environmental press, a property or attribute of the group environment that facilitates or impedes the efforts of an individual to reach a particular goal. The GCQ measures three key features that are common to all therapy groups: engagement (reflecting cohesion and work in the group), avoidance (reflecting group members' reluctance to take responsibility for changing), and conflict (reflecting interpersonal conflict and distrust).

MacKenzie (1983) and others (Kivlighan & Tarrant, 2001) have suggested that the group climate has an important influence on the outcome of treatment. Engagement, for example, reflects cohesion and self-disclosure among the members and also reflects group members' attempts to understand the meaning of their behavior. Challenge and tactful confrontation (also part of engagement) promote social learning. Positive change is more likely to occur with these behaviors. Avoidance perpetuates the members' dependence on the therapist or other group members for direction. Members are reluctant to address difficult issues (both personal issues that brought them to treatment and issues that develop within the group). Little change can be expected when group members avoid taking responsibility for addressing such difficulties. Finally, conflict does little to ease members' concerns about trust and heightens friction among the members. This is likely to lead to withdrawal or outbursts of anger, both of which can impede work within the group.

Despite the considerable attention to group climate in the literature, few studies have examined the effect of group climate on treatment outcome. These studies have differed in terms of whether the group climate was represented by a single, static score or by a changing score. For example, Braaten (1989) examined group climate ratings from a single session (Session 4) for therapy groups with mental health professionals and training groups with students. Each type of group was 14 sessions long. He found that higher levels of engagement and lower levels of avoidance at the fourth session were associated with better outcome. This is the only study reported in the literature that has examined the effect of early group climate on outcome. Aspects of the early group process that influence treatment outcome are important to identify because the sooner difficulties in group are recognized, the more time is available to address them. This is particularly important for short-term groups.

Kivlighan and Lilly (1997), using a sophisticated growth curve analysis, examined changes in the group climate during interpersonal process groups with students that ranged from 14 to 26 sessions. They conducted the study to test MacKenzie's (1983) theory of appropriate stages of group development. Kivlighan and Lilly found only partial support for MacKenzie's theory. They found that a high–low–high pattern of engagement, a low–high–low pattern of conflict, and a high–low–high–low pattern of avoidance were related to benefit from the groups.

Others have examined simpler linear patterns of group climate change. Kivlighan and Tarrant (2001) found that an increasing level of engagement was related to benefit from youth support groups that lasted 8 weeks. Although these studies have taken important steps toward establishing the relationship between group climate and outcome, none of the studies actually examined this relationship in therapy groups with psychiatric outpatients. Thus, the generalization of the findings of these previous studies to psychotherapy groups is limited.

The present study examined the group climate in two forms of short-term group therapy. The study used data from a recently completed randomized clinical trial that investigated the efficacy of interpretive and supportive forms of group psychotherapy for patients experiencing complicated grief (Piper, McCallum, Joyce, Rosie, & Ogrodniczuk, 2001). The trial involved a large number of psychiatric outpatients who were matched on a number of characteristics and then randomized to treatments. Treatment manuals were used, and therapist adherence to the manuals' guidelines was monitored. Patient functioning in a number of areas was assessed at pretherapy and posttherapy. Findings from the trial indicated that interpretive and supportive group therapy were similarly effective in facilitating favorable change in a number of outcome areas and had comparable dropout

rates (22% for interpretive therapy and 24% for supportive therapy).

The primary objective of the present study was to determine the association between dimensions of the group climate and treatment outcome. The study examined the effect that early group climate had on treatment outcome, as well as whether change in the group climate across the treatment period or the average level of group climate was associated with outcome.

There were two secondary objectives of the present study. The first was to determine whether the association between group climate and outcome differed in the two forms of therapy that were provided in the trial. The second was to determine whether there were any differences in the group climate of the two forms of therapy that were provided in the trial. To our knowledge, this is the first study to examine the group climate in interpretive and supportive forms of short-term group therapy for patients with complicated grief. Given the differences in the objectives and techniques of these two forms of therapy, a natural question to address was whether they also differed in terms of group climate.

Method

Procedure

A detailed description of the design and methodology of the trial is presented by Piper et al. (2001). Patients were referred to the project from the Psychiatric Treatment Clinic of the Department of Psychiatry, University of Alberta Hospital Site, Edmonton, Alberta, Canada. They were referred if they met inclusion criteria for complicated grief as described below. Patients were not referred if a comorbid disorder would interfere with the patient's ability to benefit from group therapy (e.g., organic brain disorder), if a comorbid disorder required immediate management and alternative treatment (e.g., severely depressed, manic, suicidal, or psychotic condition), or if a decision was made to treat a comorbid disorder first (e.g., simple phobia disorder).

Patients were asked to complete three brief questionnaires to determine whether the they met complicated grief criteria. The questionnaires were a set of pathological grief items (PGI) adapted from work by Prigerson et al. (1995), the Impact of Events Scale (IES; M. J. Horowitz, Wilner, & Alvarez, 1979), and the Social Adjustment Scale—Self Report (SAS–SR; Weissman & Bothwell, 1976). The first two scales (PGI and IES) were completed for the one or two most significant death losses in the patient's life.

To meet the inclusion criteria, the patient had to score 10 or higher on the PGI, the Intrusion subscale of the IES, or the Avoidance subscale of the IES for at least one loss and score 2.0 or higher on one of the six subscales of the SAS–SR. These criteria were selected, after a review of previous studies, to include patients with at least moderate grief symptomatology and social (role) dysfunction. Most patients who met the inclusion criteria considerably exceeded the minimum requirements. Patients were matched on personality variables, use of medication, and, when possible, gender and age. Matched patients were assigned randomly to interpretive or supportive group therapy. One hundred seven patients completed therapy (i.e., attended eight or more sessions). Fifty-three were from interpretive therapy and 54 were from supportive therapy.

Patients

All of the 107 treatment completers received diagnoses according to the revised third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM–III–R*; American Psychiatric Association, 1987). Axis I diagnoses were identified by the computer-administered Mini-Structured Clinical Interview for *DSM–III–R* (First, Gibbon, Williams, & Spitzer, 1990) and were validated by an independent clinical diagnosis assigned jointly by the intake assessor and a psychiatrist, both of whom saw the patient on the day of intake. A total of 73.8% of the patients received an Axis I diagnosis. The most frequent disorders were current major depression (54.2%) and dysthymia (8.4%).

Axis II diagnoses were determined by the computer-administered Structured Clinical Interview for *DSM–III–R* Personality Questionnaire and the Auto-Structured Clinical Interview for *DSM–III–R* (First, Gibbon, Williams, & Spitzer, 1991). A total of 55.1% of the patients received an Axis II diagnosis. The most frequent Axis II disorders were avoidant

(26.2%), dependent (13.1%), borderline (9.3%), and obsessive–compulsive (4.7%). A total of 38.3% of the patients received both Axis I and Axis II diagnoses.

The average age of the patients was 43.0 years (SD = 10.3, range = 19–67). Seventy-seven percent were women. Forty-one percent were married or living with a partner, 26% were separated or divorced, 18% were widowed, and 15% had never been married. Forty-seven percent were educated beyond high school, and 52% were employed. Ninety percent of the patients were Caucasian. Many (72%) reported having received previous psychiatric treatment, but few (15%) had a history of psychiatric hospitalization. The types of losses reported by the patients and their prevalence were as follows: parent (49%), partner (15%), child (9%), sibling (10%), friend (4%), grandparent (5%), and other (8%). The average time since the loss(es) was 8.9 years (SD = 11.1, range = 0.25–47.0).

Therapists

The therapists were a 40-year-old male psychologist, a 41-year-old female social worker, and a 40-year-old female occupational therapist. They had substantial experience practicing group therapy (13, 14, and 10 years). The psychologist conducted four therapy groups and the other two therapists conducted six therapy groups each. The therapists conducted both interpretive therapy groups and supportive therapy groups in the trial.

Therapies

Each patient received a form of group therapy that emphasized interpretive or supportive features, labeled interpretive therapy and supportive therapy, respectively. The contractual and structural features were similar. The patient was scheduled for weekly 90-min sessions for 12 weeks. Punctual attendance was emphasized. Session attendance for completers was high. For interpretive therapy, the mean was 10.7 (SD = 1.4). For supportive therapy, the mean was 10.6 (SD = 1.3). The therapist was paid by a third party. Apart from these similarities, the overall objectives, session objectives, and therapist technique for the two forms of therapy were quite different.

In interpretive therapy, the primary objective is to enhance the patients' insight about repetitive conflicts (intrapsychic and interpersonal) and trauma that are associated with the losses and that are assumed to serve as impediments to experiencing a normal mourning process. A related objective is to help the patients develop tolerance for ambivalence toward the people whom they have lost. The therapist attempts to create a climate of tolerable tension and deprivation wherein conflicts can be examined through the use of the here-and-now experience. In regard to technique, the therapist encourages the patients to explore uncomfortable emotions and withholds immediate praise and gratification. The therapist is active, interpretive, and transference focused.

In supportive therapy, the primary objective is to improve the patients' immediate adaptation to their life situations. It is assumed that improvements in symptomatology and social (role) functioning can be achieved through the provision of support and problem solving. The therapist attempts to create a climate of gratification wherein patients can share common experiences and feelings and receive praise (reinforcement) for their efforts at coping. In regard to technique, the therapist is active, noninterpretive, and other focused (i.e., focused on the patients' current external relationships).

The therapists were experienced in providing a variety of interpretive and supportive therapies. Each had participated in a weekly loss group seminar and had conducted pilot groups before conducting groups in the study. The seminar continued throughout the project. The therapists followed technical manuals for interpretive group therapy and supportive group therapy for loss patients. The manuals described, illustrated, and compared the technical emphases of the two forms of group therapy. Adherence to the technical manuals was monitored for all sessions by external observers. The evidence from the adherence ratings indicated that the two forms of therapy were well differentiated and conformed to the technical manuals.

Group Climate

Group climate was measured using the Group Climate Questionnaire—Short Form (GCQ–S; MacKenzie, 1983). This is a self-report measure designed to assess the perceptions of a group's

therapeutic environment by individual group members. The GCQ–S contains 12 items that are rated on a 7-point Likert scale indicating extent of agreement ranging from 0 (*not at all*) to 6 (*extremely*). The items are divided into three subscales: engagement (5 items), avoidance (3 items), and conflict (4 items).

Engagement is a multifaceted dimension that reflects a cohesive environment and willingness of members to participate in the group. It involves a sense of closeness, attempts to understand the meaning of behavior, the importance of the group for the members, a willingness to challenge one another, and self-disclosure. A high score indicates a positive working atmosphere where members are involved in the group and able to interact freely with one another. *Avoidance* pertains to the reluctance of group members to take responsibility for psychological change. It involves avoiding problems within the group, depending on the therapist for direction, and adhering to group expectations. A high score suggests that patients are reluctant to take responsibility for examining their problems, are superficial in their discussions, and are highly influenced by the group norms for behavior. *Conflict* suggests the presence of interpersonal friction. It involves anger within the group, distance between the members, distrust, and tension among the members. A high score indicates an atmosphere where patients confront one another in an aggressive manner, distrust each other, and withdraw from each other.

Internal consistency of the GCQ–S subscales has been high, with alpha coefficients ranging from .88 to .94 (Kivlighan & Goldfine, 1991). The validity of the GCQ–S has also been established in a number of studies. Ratings on the GCQ–S have been found to differentiate different types of group therapy (Joyce, Azim, & Morin, 1988), group therapies of varying duration (Kanas, Stewart, Deri, Ketter, & Haney, 1989), and different patient samples (Daroff, 1996). In addition, variations in GCQ–S ratings during treatment have been found to be consistent with developmental group therapy theory (Brossart, Patton, & Wood, 1998) and related to therapeutic gain (Kivlighan & Lilly, 1997). In the present study, patients provided group climate ratings after each third of therapy (i.e., after Sessions 4, 8, and 12, corresponding to the beginning, middle, and termination phases of therapy).

Outcome

Assessment of outcome included 14 measures (questionnaire or interview) that covered 15 variables in the areas of grief symptoms, interpersonal distress, social (role) functioning, psychiatric symptoms, self-esteem, life satisfaction, and physical functioning. Severity of disturbance for individual target objectives was also assessed.

Grief symptoms were measured by 7 pathological grief items (Prigerson et al., 1995), the 7-item Intrusion subscale and the 8-item Avoidance subscale of the IES (M. J. Horowitz, Wilner, & Alvarez, 1979), and the 13-item Present Feelings Subscale of the Texas Revised Inventory of Grief (TRIG; Faschingbauer, Zisook, & DeVaul, 1987). The IES and TRIG are well-known scales with established reliability and validity. The three scales were completed for the one or two most significant death losses in the patient's life. If there were two losses, the scores were averaged.

The overall score from the 64-item Inventory of Interpersonal Problems (L. Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) was used to measure interpersonal distress. The overall score from the 54-item Social Adjustment Scale—Self Report (SAS–SR; Weissman & Bothwell, 1976) was used to measure social (role) functioning. For psychiatric symptomatology, depression was assessed by the 21-item Beck Depression Inventory (Beck & Steer, 1987); anxiety, by the 20-item Trait Anxiety Scale (Spielberger, 1983); and general symptomatic distress, by the Global Severity Index of the 53-item Brief Symptom Inventory (Derogatis, 1993). Self-esteem was measured by Rosenberg's (1979) 10-item Self-Esteem Scale. Physical functioning was assessed by the 10-item Physical Functioning subscale of the SF–36 Health Survey (Medical Outcomes Trust, 1994). All of the scales described above are well known and have been repeatedly demonstrated to have good reliability and validity. Life satisfaction was measured by a single item rated on a 7-point Likert-type scale that ranged from 1 (*completely dissatisfied*) to 7 (*completely satisfied*).

Individualized target objectives were formulated by the patient with the assistance of an independent assessor (a bachelor's-level research assistant). The patient's average rating, the independent assessor's average rating, and the therapist's average rating of severity of disturbance for the objectives were used as outcome scores. Two rater reliability determinations for the assessor's rating, using six raters and 12 cases each, yielded an average intraclass correlation coefficient (2,1) of .96, indicating high reliability. A content analysis of the objectives revealed that 70% of the patients made explicit reference to loss in one or more of their objectives (e.g., "To be able to talk about my dad without tears coming to my eyes").

Residual change scores (pretherapy to posttherapy) were calculated for each of the 15 outcome variables. The scores represent change with the influence of the prescore on the postscore removed. Because of moderate to high correlations among the scores, a principal-components analysis with orthogonal rotation was used to reduce the 15 variables to a smaller number of outcome factors. Three factors (eigenvalues > 1) emerged, which accounted for 67% of the variance. The factors (General Symptoms, Grief Symptoms, and Target Objective Severity and Life Dissatisfaction) and their corresponding outcome variables and loadings are listed in Table 1. The General Symptoms factor was moderately correlated with the Grief Symptoms factor, $r(103) = .51$, $p < .01$, and the Target Objective Severity and Life Dissatisfaction factor, $r(105) = .66$, $p < .01$. The Grief Symptoms factor and the Target Objectives Severity and Life Dissatisfaction factor were also moderately correlated, $r(103) = .52$, $p < .01$.

Approach to Analysis

First, change in group climate across the three phases of therapy (for the combined sample and for each form of therapy) was examined using repeated measures analysis of variance. If the change in group climate was significant, we investigated whether the change was associated with treatment outcome. Repeated measures analysis of variance was used to examine the

Table 1
Outcome Factors, Variables, and Loadings

Outcome factor and variable	Loadings		
	Factor 1	Factor 2	Factor 3
General Symptoms (31% of variance)			
Anxiety	.84	.15	.27
Depression	.83	.17	.38
Interpersonal distress	.81	.10	.00
Self-esteem	.81	.01	.21
General symptomatic distress	.77	.29	.30
Social (role) dysfunction	.69	.23	.17
Physical dysfunction[a]	−.56	−.18	−.27
Grief Symptoms (19% of variance)			
Intrusion	.06	.86	.15
Pathological grief	.11	.84	.23
Grief (TRIG)	.14	.75	.28
Avoidance	.30	.68	−.10
Target Objective Severity and Life Dissatisfaction (17% of variance)			
Target severity			
Therapist	.11	.05	.76
Assessor	.37	.24	.70
Patient	.30	.33	.66
Life satisfaction[a]	−.51	−.10	−.61

Note. Factor 1 = General Symptoms; Factor 2 = Grief Symptoms; Factor 3 = Target Objective Severity and Life Dissatisfaction. TRIG = Texas Revised Inventory of Grief.
[a] High scores are favorable.

association between change in group climate and outcome.

Second, we examined whether early group climate (i.e., during the first phase of therapy) was associated with treatment outcome by means of three-step hierarchical regression analyses. The three group climate variables were entered at Step 1, the three two-way interactions among the group climate variables were entered at Step 2, and the three-way interaction among the group climate variables was entered at Step 3. Using similar, three-step hierarchical regression analyses, we also examined whether group climate averaged across the three phases of therapy was associated with treatment outcome.

Third, we examined whether the association between each of the group climate variables and outcome differed between the two forms of therapy. Hierarchical regression analyses were used. Form of therapy and group climate were entered at Step 1, and the interaction of form of therapy and group climate were entered at Step 2. A significant interaction effect would indicate a differential relationship between group climate and outcome in the two forms of therapy.

Finally, we examined differences in group climate between the two forms of therapy at each phase of therapy. Independent samples t tests were conducted. As described above, the nature of the two forms of group therapy provided in the trial were quite different. Relative to supportive therapy, the interpretive therapy situation was more demanding, depriving, and anxiety arousing. Relative to interpretive therapy, supportive therapy was more relaxing, gratifying, and comforting. We examined the group climate ratings to investigate whether they could differentiate the two forms of therapy.

Results

Change in Group Climate

Engagement. Using repeated measures analysis of variance with the combined sample, we found that engagement increased significantly over the three phases of therapy: Pillai's Trace $F(2, 90) = 15.77, p < .01$. The two forms of therapy were not found to significantly differ. Change in engagement was not significantly associated with any of the three outcome factors.

Avoidance. Avoidance was not found to significantly change across the three phases of therapy for either form of treatment.

Conflict. Similarly, conflict was not found to change significantly over time for either form of therapy.

Early Group Climate

Main effects. Early engagement was directly related to favorable outcome for the Grief Symptoms outcome factor, $t(92) = 2.47, p < .02$, and the General Symptoms outcome factor, $t(93) = 2.47, p < .02$. Neither early avoidance nor early conflict was significantly associated with treatment outcome.

Interaction effects. A significant interaction between early avoidance and early conflict was found for the Grief Symptoms outcome factor, $t(92) = 2.28, p < .03$, and the General Symptoms outcome factor, $t(93) = 2.14, p < .04$. The findings revealed that avoidance was directly associated with favorable outcome when the level of conflict was high. There was minimal association between avoidance and outcome when conflict was low.

A significant interaction was also found between early engagement and early conflict for the Grief Symptoms outcome factor, $t(92) = 2.70, p < .01$. The finding revealed that engagement was negatively related to favorable outcome when the level of conflict was high. However, when conflict was low, engagement was directly related to favorable outcome.

Average Group Climate

Main effects. Average engagement was directly related to favorable outcome for the Grief Symptoms outcome factor, $t(92) = 3.00, p < .01$; the General Symptoms outcome factor, $t(93) = 2.28, p < .03$; and the Target Objectives and Life Dissatisfaction outcome factor, $t(103) = 2.13, p < .04$. Neither average avoidance nor average conflict was significantly associated with outcome.

Interaction effects. A significant interaction between average avoidance and average conflict was found for the Grief Symptoms outcome factor, $t(92) = 2.08, p < .05$, and the General Symptoms outcome factor, $t(93) = 2.79, p <$

.01. As before, the findings indicated that avoidance was negatively associated with favorable outcome when the level of conflict was high. There was minimal association between avoidance and outcome when conflict was low.

Interaction Between Group Climate and Form of Therapy

There were no significant interactions found between each of the group climate variables and form of therapy. Thus, the relationship between the group climate dimensions and outcome were similar in interpretive group therapy and supportive group therapy.

Levels of Group Climate in the Two Forms of Therapy

Engagement. Table 2 shows that the level of engagement was similar during the first two phases of therapy in interpretive and supportive groups. The ratings reflected moderate to high levels of engagement. In the third phase, engagement was significantly higher in supportive groups.

Avoidance. Avoidance was significantly higher in interpretive groups as compared with supportive groups during each phase of therapy (see Table 2). Avoidance in groups in each form of therapy reflected only low to moderate levels across the phases of therapy.

Conflict. Interpretive groups also had significantly higher levels of conflict than supportive groups during each phase of therapy (see Table 2). Ratings of conflict reflected only low levels.

Discussion

The present study provides evidence that the common factor of group climate is related to outcome of group psychotherapy. More specifically, the findings revealed that engagement was significantly related to favorable treatment outcome. The positive effect of engagement was evident as early as the beginning phase of therapy (i.e., after the fourth session). Engagement averaged across all three phases of therapy was also found to be significantly associated with favorable outcome. These findings are consistent with the results of several previous studies (Braaten, 1989; Kivlighan & Lilly, 1997; Kivlighan & Tarrant, 2001). In contrast, change in engagement during treatment was not significantly related to outcome. In regard to other group climate dimensions, neither avoidance nor conflict (early ratings, averaged ratings, or change in ratings) was significantly related to outcome. The relationships between the group climate dimensions and outcome did not differ significantly between the two forms of therapy provided in the study.

MacKenzie (1983) argued that engagement captures many elements of cohesion. Cohesion refers generally to the quality of relationships that develop among group members. In individual therapy, a positive relationship, specifically

Table 2
Group Climate Ratings From the Three Phases of Therapy

	Interpretive therapy		Supportive therapy				
Group climate dimension	*M*	*SD*	*M*	*SD*	*t*	*df*	*p*
Engagement							
Beginning	4.0	0.8	4.0	1.0	0.02	104	.98
Middle	4.2	0.7	4.2	0.7	0.52	102	.61
Termination	4.3	0.9	4.7	0.6	2.22	93	.03
Avoidance							
Beginning	2.8	0.9	2.3	0.8	2.95	104	.01
Middle	2.8	1.0	2.3	1.0	2.11	102	.04
Termination	2.8	1.0	2.3	0.9	2.74	93	.01
Conflict							
Beginning	1.9	1.2	1.2	0.7	3.83	104	.01
Middle	1.8	1.0	1.2	0.9	2.66	102	.01
Termination	1.7	0.9	1.1	0.8	3.80	93	.01

the therapeutic alliance, has been shown to be related to outcome. In group therapy, a network of these relationships (i.e., cohesion among group members) likely serves a similar purpose. A number of authors have found that cohesion and alliance are related constructs but that each independently predicts treatment outcome (Budman et al., 1989; Marziali et al., 1997).

Thus, one possible explanation for the significant effect of engagement on treatment outcome in the present study is that group members who perceive that patients get along well with each other, particularly early in the life of the group, are better able to engage in the tasks of treatment and thus reap greater benefits from the group. Greater engagement, reflecting higher levels of cohesion, may provide patients with encouragement and reinforcement for their attempts to get better. This may facilitate optimism and expectation for improvement, which have been found to favorably influence treatment outcome (Joyce & Piper, 1998). It may also encourage patients to take more risks in the group (e.g., being more open about uncomfortable emotions or trying new ways of interacting with others).

Furthermore, an engaged group climate reflects participants' efforts to understand their behavior, to self-disclose personal information or feelings, and to challenge and confront each other to sort out difficult issues. All of these behaviors represent different aspects of work in a psychotherapy group. Such work behaviors are believed to be necessary requirements for therapeutic change. Previous studies have indicated that increased work was significantly related to more favorable treatment outcome (Piper, Joyce, Rosie, & Azim, 1994). Thus, perceptions of high engagement in the present study may have reflected the patients' greater involvement in work tasks, thus facilitating increased benefit from the group.

The present study also found several interaction effects between group climate dimensions. To our knowledge, this is the first study to document group climate interactions in the prediction of outcome. There was an interaction between avoidance and conflict. This interaction was evident after the first phase of therapy, as well as when considered across all three phases of therapy. When patients perceived considerable conflict in the group, less avoidance was related to worse outcome on the Grief Symptoms and General Symptoms outcome factors. However, when there was low perceived conflict, avoidance had little relation to outcome.

In regard to the first part of the interaction, low avoidance indicates that group members were attending to important issues that were sensitive, personal, and likely painful to discuss. Patients often experience considerable distress and anxiety when they try to deal with important issues related to their losses in group therapy. They may also feel vulnerable by exposing themselves to the other group members. Perceiving high conflict in the group, the patient may feel that the group is not empathic or supportive of his or her attempts to address important material. This is likely contrary to the patient's expectations of the group and could lead to the patient feeling frustrated, demoralized, or hopeless. In addition, perceptions of conflict and friction among group members may exacerbate their grief-specific and general symptoms, resulting in little change or even worsening over the course of therapy. Thus, conflict in the group may not only interfere with patients' attempts to address important issues in the group but also contribute to their symptoms.

In regard to the second part of the interaction, there does not appear to be an obvious explanation for why avoidance had little relation to outcome when there was low perceived conflict in the group. However, it is possible that patients who avoided attending to important loss issues still addressed less important issues (e.g., job difficulties) and thus achieved some symptomatic improvement. In addition, low avoidance may be insufficient in and of itself to affect outcome. Patients may have to do more than simply approach sensitive, personal material (characterized as low avoidance) to facilitate improvement—in other words, they must work.

A significant interaction between engagement and conflict was also found in the present study after the first phase of therapy. When patients perceived conflict in the group, higher levels of engagement were related to less favorable grief symptoms outcome. However, when there was low perceived conflict, higher levels of engagement were related to more favorable grief symptoms outcome. If we consider that engagement reflects the level of work by patients, there is an explanation that is similar to

that provided for the interaction between avoidance and conflict.

When patients are working, they are engaged in activities such as self-disclosing personal information or feelings and challenging and confronting each other. There is a certain level of anxiety that is inherent in these work behaviors. Perceived conflict and friction in the group may exacerbate patients' symptoms, leading to little change or deterioration following group. Conversely, in the absence of perceived conflict among group members, work facilitates grief symptoms outcome, as we have described above. This suggests that perceived conflict among group members interferes with work in the group.

The present study revealed both similarities and differences between the two forms of therapy in how patients perceived the group climate. Engagement was at a moderate level during the beginning and middle phases of treatment in both forms of therapy. Also similar in both forms of therapy, engagement increased significantly throughout the treatment period. However, during the termination phase, engagement was significantly higher in supportive groups. Avoidance and conflict remained at low levels throughout the treatment period in both forms of therapy. However, significantly lower levels were found in supportive groups during each phase of treatment.

The moderate to high levels of engagement and low levels of avoidance and conflict may have resulted from the homogeneous nature of the groups, therapist skill, or the short-term nature of the groups. Having therapy groups composed only of patients experiencing complicated grief may have contributed to moderate to high engagement. Greater similarity among patients has been thought to contribute to cohesion among group members (Yalom, 1995). Greater similarity may also facilitate work among the members, thus contributing to an increasingly positive sense of engagement as therapy progressed. Moderate to high engagement may also alleviate avoidance and conflict among the group members. Conflict and avoidance may also have been kept to a minimum through the timely interventions of the therapist. The therapist may have intervened at certain key points in therapy to abate nonproductive discussion, to encourage examination of important issues, and to ease friction between group members. The short-term nature of the groups also may have played a role in affecting group climate. With only a brief, limited amount of time available, there is pressure on patients (and therapists) to work in therapy. This may contribute to moderate to high engagement in the group. This pressure to work may also help to minimize avoidance.

Differences in the levels of group climate between the two forms of group therapy that were provided are likely a function of differences in their basic nature. The more gratifying, nurturing, and encouraging behavior of the supportive therapist may have been responsible for the significantly lower levels of avoidance and conflict in supportive groups. In addition, the principle guiding termination in supportive groups is to praise the members for their accomplishments and to emphasize it as an exciting new beginning. This may have contributed to the significantly higher level of engagement in supportive groups compared with interpretive groups during the termination phase.

In addition, the risk–responsibility model for structuring therapy groups (Bednar, Melnick, & Kaul, 1974) may explain some of the differences in the group climate that were observed in the present study. The model suggests that greater structure in groups reduces anxiety and risk involved in participating in the group, letting group members engage in less anxiety-related behaviors. Although both the supportive and the interpretive forms of group therapy provided in the present study worked on the premise that the patients should determine the content of each session, supportive group therapy is comparably more structured. This is due to the fact that the therapist in supportive group therapy is often focused on problem solving and providing guidance. These therapist activities can provide greater focus in the session, thus facilitating patients' involvement in the group and decreasing their anxieties about what to discuss in the group.

Although the findings of the present study require replication by others, they may be of importance to clinicians. In attempting to maximize patient gains from group treatment, clinicians should pay special attention to patients' perceptions of engagement in the beginning phase of therapy. Group leaders should look for ways to increase patients' sense of engagement in the group as a way to facilitate favorable

outcome. Levine and Moreland (1990) suggested that this can be done by encouraging expressions of warmth and acceptance among group members or by serving as targets for the group members' projective identifications. Kivlighan and Tarrant (2001) also found that the therapist may be able to facilitate engagement by decreasing attention to individual members in the group and by setting norms and goals for the group while maintaining a warm, supportive therapeutic stance.

The findings of the present study also suggest it is important for clinicians to be sensitive to all aspects of the group climate and how they interact to influence outcome. For example, we found that in some circumstances, high engagement was associated with good outcome, whereas in other circumstances, it was associated with poor outcome. This depended on the level of conflict in the group. Specifically, when conflict was low, greater engagement was associated with better outcome. However, when conflict was high, greater engagement was associated with worse outcome. The clinician will need to be attentive to the levels of these aspects of the group climate and intervene appropriately. For example, when engagement and conflict are both low, engagement should be increased. Strategies that may facilitate this include encouraging self-disclosure, providing interpretations and inviting patients' responses to interpretations, and creating a safe environment in which patients may challenge and confront each other. When engagement and conflict are both high, conflict should be minimized. Group-as-a-whole interpretations might be used to reduce or minimize conflict among group members, by attributing responsibility for difficulties to all group members rather than to any specific member. Kivlighan and Tarrant (2001) also suggested that maintaining group members' focus on the here and now will help decrease interpersonal conflict. Forming homogeneous groups may be another approach to minimizing conflict. It is important to reiterate that each aspect of the group climate should not be considered in isolation. Rather, clinicians should consider how the different aspects of the group climate interact to influence outcome. This will lead to a better understanding of the relation between group process and the outcome of therapy.

Using MacKenzie's (1983) GCQ, informed clinicians that monitor the therapeutic process may be able to predict which patients will achieve good results and which patients may be at risk for less favorable results. The brevity of this measure means that it can be used in an efficient manner by clinicians and that patients are less likely to find it intrusive compared with more comprehensive process questionnaires.

The present study is not without limitations. First, the results are correlational, therefore it is not possible to determine causal effects. However, the finding that early group climate ratings were associated with later treatment outcome suggests that group climate may have a causal effect on outcome. Second, the study sample consisted only of patients who had experienced a significant death loss and who satisfied criteria for complicated grief. The findings may not generalize to more heterogeneous therapy groups. Third, the findings may be confounded by type of loss. Patients with less prevalent types of losses (e.g., murder or suicide losses) may perceive the group climate differently (e.g., feel less engaged) than patients with more common losses (e.g., parental losses). The small number of cases with different types of death loss in the present study did not allow us to examine the association between type of loss and perception of group climate. Fourth, ratings of each patient within each of the 16 groups are not independent (i.e., they are nested). Because the present study did not account for the nested nature of the data, it is not known what effect it had on the findings. Other data-analytic techniques, such as hierarchical linear modeling, could be used to examine this issue in the future. Fifth, the study included only three repeated assessments of the group climate, thus limiting its ability to accurately describe the development of group climate over time. More frequent assessments and more sophisticated data-analytic techniques are required to provide a better test of the effect of changes in the group climate on treatment outcome. Finally, although the findings were statistically significant, they accounted for modest amounts of outcome variance. Obviously, other variables also influence the outcome of patients in group psychotherapy.

The results of this study clearly show that the group climate has an important relationship to therapeutic gain. Clinicians can use the GCQ to become aware of how patients perceive the cli-

mate within the group and help detect patients who may be at risk for treatment failure. In contrast to the position taken by Wampold (2001) that only common factors should be investigated to understand the effectiveness of psychotherapy, we believe that a more realistic and effective approach is to study how specific and common factors interact to affect outcome. To this end, it may be possible to learn how therapist technique influences the group climate, thus making it possible for therapists to understand how to remedy difficult circumstances in the group. Kivlighan and Tarrant (2001) have made advances in this direction. This challenges researchers and clinicians to examine the group climate more closely in other types of groups and in varied settings. Perhaps such examination will eventually lead to a better understanding of how clinicians may best enhance a favorable group climate in the groups that they lead and thereby improve the outcome of group psychotherapy.

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