Comparison of Therapeutic Factors in Group and Individual Treatment Processes

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Group and individual treatments have equivalent outcomes, but little is understood about the therapeutic processes in these treatment modalities; therefore, similarities and differences in the therapeutic process were explored. Critical incident obtained from 20 individual and 20 group clients were rated on 4 dimensions of session impact: emotional awareness–insight, relationship–climate, other- versus self-focus, and problem definition–change) using the Group Counseling Helpful Impacts Scale (D. M. Kivlighan, Jr., K. D. Multon, & D. F. Brossart, 1996). The findings of this study indicate different therapeutic processes in group and individual treatments. Ratings of relationship–climate and other-versus self-focus impacts were higher in the group participants' critical incident forms, whereas emotional awareness–insight and problem definition–change ratings were higher in the critical incident reports of individual treatment participants.

A number of studies have compared the efficacy of individual and group psychotherapy. A meta-analysis by McRoberts, Burlingame, and Hoag (1998) examining 23 of these studies found that equivalent outcomes exist for both modalities of treatment. These quantitative findings are consistent with previous qualitative reviews that detected no difference in efficacy between the two formats (Fuhriman & Burlingame, 1994; Orlinsky & Howard, 1986). McRoberts et al. (1998) further highlighted the fact that little is understood about the similarities or differences in the processes of group and individual treatment. Therefore, although both modalities are equally efficacious, delineating how the therapy process occurs could be helpful in understanding why or how two seemingly different approaches to therapy yield the same outcome.

Few studies have examined the process differences between group and individual treatment. Therefore, many questions regarding the means by which equivalent outcomes are attained in the two differing treatment formats remain: Are the outcomes the same because both types of treatment consist of similar processes? Or are there different processes that occur in group and individual treatment? Does either type of treatment contain specific therapeutic components? If so, what are they? And, if the processes in group and individual treatment are different, how is it that both modalities have the same outcome?

An important aspect of process analysis is the examination of therapeutic factors, one of the essential aspects of the treatment process. Yalom (1995) defined therapeutic factors as "the actual mechanisms of effecting change in the patient" (p. xi). To accurately and systematically study and understand the treatment process of group and individual counseling, one must be able to

clearly define the therapeutic factors that operate in the treatments. Researchers have examined therapeutic factors in both individual and group counseling. Corsini and Rosenberg (1955) first delineated therapeutic factors in group psychotherapy when they identified nine categories of factors at the conclusion of an extensive literature review. Berzon, Pious, and Farson (1963) established a list of 9 therapeutic factors to which Yalom (1995) added to create his list of 11 therapeutic factors that are discussed in his group-therapy text.

Kivlighan, Multon, and Brossart (1996) identified three widely used, empirically based systems for categorizing or classifying therapeutic factors. In Bloch, Reibstein, Crouch, Holroyd, and Themen's (1979) system, raters assign client descriptions of important session events to categories of therapeutic factors: catharsis, self-disclosure, learning from interpersonal actions, universality, acceptance, altruism, guidance, self-understanding, vicarious learning, and instillation of hope. Elliott's (1985) system defined therapeutic impact as "the immediate effects on the client of specific counselor responses" (p. 307). His helpful events included new perspective, problem solution, problem clarification, focusing awareness, understanding, client involvement, reassurance, and personal contact. Mahrer and Nadler's (1986) good moments system consists of times in therapy when positive therapeutic process, improvement, or change occurred. The 11 good moments include provision of personal material about self and interpersonal relationships, description–exploration of the personal nature and meaning of feelings, emergence of previously warded-off material, expression of insight–understanding, expressive communication, expression of a good working relationship with the therapist, expression of strong feelings toward the therapist, expression of strong feelings in extratherapy contexts, expression of a qualitatively different personality state, expression of new ways of being and behaving, and expression of a general state of well-being.

Kivlighan et al. (1996) developed the Group Counseling Helpful Impacts Scale (GCHIS) by combining the items found in the category systems developed by Elliott (1985), Mahrer and Nadler (1986), and Bloch et al. (1979). The GCHIS is designed to cate-

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gorize open-ended responses called *critical incident reports* into therapeutic factors. The reporting of critical incidences (Neimeyer & Resnikoff, 1982) involves having a client complete an open-ended questionnaire designed to determine the client's view of helpful or most significant impacts in treatment.

Using factor analysis, Kivlighan et al. (1996) found four underlying components for the GCHIS: emotional awareness–insight, relationship–climate, other- versus self-focus, and problem definition–change (see Table 1). The emotional awareness–insight category includes items indicating strong affective experiences connected with gaining awareness and insight and some cognitive factors. The second component, relationship–climate, involves items related to the formation and maintenance of relationships between either client and therapist or group members. The third component is other- versus self-focus; four of the items in this component are related to the client's focus outside of him- or herself (i.e., altruism), although he or she has an internal focus (i.e., self-disclosure). The fourth and final component, problem definition–change, focuses on a problem-solving aspect of treatment including both the cognitive identification and understanding of a problem as well as the behavioral change that ideally follows.

Fuhriman and Burlingame (1990) attempted to elucidate differences in therapeutic factors in the group and individual formats by comparing various process variables in group and individual counseling. They examined a number of previous studies of therapeutic factors and found that many therapeutic factors are shared by both counseling modalities because of the similar goals of creating a helping relationship and environment. Factors discussed as central to the counseling process for both individual and group included insight (connection between new information realized in therapy and self), catharsis (release of feelings), reality testing (self-evaluation aimed at detecting and redirecting distorted conceptions), hope (the expectation of improvement), disclosure (release of personal information), and identification (association of self with aspects of external world). Fuhriman and Burlingame reported that some authors differentiate some of these factors as unique to one or the other modality with nominal alterations, such as by referring to "insight" as "new perspective" or by preceding the factor with the word "multiple" to distinctly associate it with group psychotherapy (Weiner, 1984). Their classification of factors was based on the definitions provided by the various authors they examined.

Elliott and Wexler (1994) developed the Session Impact Scale (SIS) to measure various impacts in the therapy. They based the formation of the helping factors of the SIS on two primary impacts for individual counseling: task and relationship. Task impact includes aspects of therapy in which the client gains insight or understanding and applies new understanding to problem solving.

Table 1

Means and Standard Deviations for the Four Group Counseling Helpful Impacts Dimensions

Variable	M	SD
Emotional awareness–insight	1.37	1.55
Relationship–climate	2.60	1.62
Other- versus self-focus	1.35	1.38
Problem definition–change	1.22	1.62

The relationship impact reflects positive aspects of the interpersonal interactions between client and therapist. The analysis of the SIS supported this dyadic breakdown of positive session impacts. Elliott and Wexler (1994) also found that items related to feeling understood and supported by the therapist were the most highly rated on the relationship impacts scale, and items related to being aware of and defining problems were most commonly endorsed for task impacts.

Stiles et al. (1994) identified three primary factors for individual therapy while evaluating and describing the SIS and Session Evaluation Questionnaire (SEQ; Stiles, 1980). Understanding, problem solving, and relationship were found to be positive impacts identified by the SEQ. The understanding and problem solving components further elucidated the structure presented by Elliott and Wexler (1994) by subdividing the task impacts factor. Stiles et al. (1994) described the processes of the three impacts. Understanding included the client gaining insight, understanding, and experiencing some scheme change. Problem solving is the process of the client applying new understanding and insights to his or her problems. The relationship impact reflects the process of developing and maintaining the relationship between client and therapist.

Fuhriman and Burlingame (1990) identified six factors as unique to group therapy situations. Therapeutic factors associated with only group psychotherapy involved vicarious learning (client improvement in response to the observation of another group member's experience), role flexibility (client as both help seeker and help provider), universality (group member's realization that other members are struggling with similar problems), altruism (client's offering of support and encouragement to other group members), family reenactment (resemblance of group to one's family of origin), and interpersonal learning (learning from interpersonal interaction with other clients).

Fuhriman and Burlingame also addressed other learning experiences unique to group therapy, such as participating in a social microcosm, which is the idea that extratherapy interpersonal relationships will be manifested in the group, providing clients with an opportunity to therapeutically work through transference. The group format also provides a forum for the giving and receiving of feedback and validation from people other than the therapist. It also creates an atmosphere in which the client can experience role versatility in that he or she shifts between being a help seeker and a help provider for other group members.

Disagreement over the uniqueness of these factors to group treatment exists. Hill (1990) argued that many of the factors identified as unique to group treatment are actually present in individual treatment as well. For example, she emphasized that universality is created by the individual therapist when he or she reassures or self-discloses to the client to increase the client's feelings of normalcy. However, Mallinckrodt (in press) suggested that some factors, such as universality, could be much more salient in group treatment because of the wider base of people to whom a client can relate. The nature and role of therapeutic factors in individual and group treatment is still greatly enigmatic and is in need of further elucidation.

The purpose of this study was to determine the similarities or differences in the pattern of therapeutic factors in group and individual counseling using the four components in the GCHIS. On the basis of previously mentioned studies and theoretical

writings, we expected that the pattern of therapeutic factors would be different in group and individual treatment with particular therapeutic components appearing to be more salient in group than in individual treatment. We hypothesized that participants in individual treatment would identify the emotional awareness–insight and problem definition–change components more frequently than would group participants on the basis of the basic impacts of individual treatment as described by Elliott and Wexler (1994) and by Stiles et al. (1994). Furthermore, we hypothesized that the relationship–climate component and the other- versus self-focus component would be found more often in the group treatment sessions. Although relationship will likely be important in both modalities, we expected a stronger endorsement of the relationship–climate component in group treatment because of the relational nature of the factors already identified as unique to this modality by Fuhriman and Burlingame (1990).

Method

Participants

This study used a sample consisting of two groups of participants: 20 group treatment participants and 20 individual participants. All clients came from a university counseling center at a large Midwestern university. The first set of clients consisted of 20 group treatment participants that included 12 women and 8 men. Their ages ranged from 20 to 35 years ($M = 25.8$, $SD = 5.2$). Two of the group clients were African American and 18 were European American. To assure independence of data to meet the assumptions of the statistical tests, we only used data from one group client per counseling group. When we had data from multiple clients in a group, we randomly chose one client's data for analysis. Ten of the group clients were participating in heterogeneous, unstructured, "here-and-now" interaction-based therapy groups (e.g., Yalom, 1995). The other 10 group clients were participating in more structured theme (e.g., eating disorders) or skill (e.g., self-esteem building) groups. All groups were co-led. Co-leader experience ranged from second semester practicum student to doctoral level psychologist with over 20 years of professional experience. The 40 group co-leaders completed a self-rating scale of "the extent to which they believed in and followed the conceptual framework and techniques of the three major theories of therapy," ranging from 1 (*do not believe in or follow*) to 5 (*believe in and follow*; Gelso, Hill, Mohr, Rochlen, & Zack, 1999, p. 259). The average ratings for the group co-leaders were 3.51 ($SD = 0.52$) on psychodynamic approaches, 3.43 ($SD = 0.41$) on humanistic approaches, and 3.37 ($SD = 0.62$) on cognitive-behavioral approaches.

The second group of 20 individual treatment participants consisted of 14 women and 6 men. The range of ages was 18 to 32 years ($M = 23.2$, $SD = 4.7$). Three of these participants were African American and 17 were European American. Therapist experience ranged from first semester practicum student to doctoral level psychologist with over 20 years of professional experience. The 20 individual therapists completed the same self-rating scale of conceptual framework and techniques as did the group co-leaders. The average ratings for the individual therapists were 3.56 ($SD = 0.49$) on psychodynamic approaches, 3.52 ($SD = 0.47$) on humanistic approaches, and 3.33 ($SD = 0.59$) on cognitive-behavioral approaches.

Measures

Critical Incident Questionnaire (CIQ). The CIQ was used to identify the most important event in either a group or an individual treatment session. The questionnaire is open-ended and reads as follows for groups: "Of the events which occurred in this session, which one do you feel was the most important to/for you personally? Describe the event: what actually took place, the group members involved, and your own reaction. Why was it important for you?" For individuals, the question is slightly different: "What was the most important thing that happened in this session (that is, what stood out for you)? Please be as specific as you can. Why was it important and how was it helpful or not helpful?"

Group Counseling Helpful Impacts Scale (GCHIS). The GCHIS (Kivlighan et al., 1996) was used to rate CIQs for the presence of therapeutic factors in both group and individual treatment sessions. The GCHIS is a 28-item scale that combines adapted items from three different rating scales. Items were taken from Elliott's (1985) taxonomy of helpful impacts, Mahrer and Nadler's (1986) good moments system, and Bloch et al.'s (1979) therapeutic factors rating system. The rating scale is a 5-point Likert scale (0 = *not at all*, 1 = *slightly*, 2 = *somewhat*, 3 = *pretty much*, and 4 = *very much*). The 28 items of the GCHIS have been subdivided into four components: emotional awareness–insight (e.g., expressing insight/understanding); relationship–climate (e.g., feeling supported or encouraged); other- versus self-focus (e.g., realizing something new about someone else); and problem definition–change (e.g., making progress toward knowing what to do about problems). Each CIQ was rated on all 28 items of the GCHIS, with ratings ultimately collapsed into the four components.

Interrater reliability was established at the item level with the use of Ebel's (1951) formula. The range of reliability coefficients was .61 for items such as "more aware of or clearer about feelings, experiences" to .99 for items such as "expression of insight/understanding" and "instillation of hope." Kivlighan et al. (1996) did not examine interrater reliability at the scale level. However, coefficient alphas for each of the four scale components were determined. The coefficient alphas for the scales are as follows: emotional awareness–insight (.88), relationship–climate (.86), other- versus self-focus (.61), and problem definition–change (.78). Validity was established by examining the relationship between the four components and group member ratings of leadership dimensions and group climate. As predicted, more technical leadership was related to the emotional awareness–insight and problem definition–change factors, whereas more personal leadership was related to the relationship–climate and other-versus self-focus components. Also, a more engaged group climate was connected to the component of problem definition–change.

Procedures

Both group and individual treatment participants signed consent forms at the inception of their treatment. Participants were asked to complete CIQs at the end of every group or individual counseling session to accurately record what the participant viewed as most important in the treatment session and why. To maintain anonymity and to prevent bias in treatment, neither group nor individual therapists had access to the participants' CIQs. Individual participants met with their therapists once a week for two academic semesters. Groups met twice a week for one academic semester.

Two female graduate students in counseling psychology were taught to rate the CIQs using the GCHIS. The training included the distribution of packets consisting of relevant articles describing the specific components of the GCHIS and a 1-hr session discussing the packet information and practicing the ratings of CIQs. One judge individually rated all the CIQs with all 28 items on the GCHIS. A second judge rated a random sample of 100 CIQs in the same manner. Both judges were unaware of whether the CIQ came from individual or group treatment and were also unaware of the session from which the CIQ came. Each CIQ for both individual and group treatment was rated on all 28 dimensions of the GCHIS by trained judges and was then collapsed into the four GCHIS components. The relationship between the four therapeutic components and the type of treatment used, and the amount of treatment were all analyzed with a hierarchical linear model (HLM) to determine if either treatment modality or amount of time in treatment had a significant relationship with the four GCHIS components.

Results

Because we could not randomly assign clients to group or individual treatment, it was important to examine potential alternative explanations for possible differences in therapeutic factors between individual and group treatment. A major possible alternative explanation was therapist differences. To assess for possible differences between therapists in individual and group treatment, we compared gender mix (chi-square), therapist age (t tests), and theoretical orientation (t tests). There were no significant differences (all $ps > .05$) in gender mix, age, or theoretical orientation between individual and group therapists. These findings suggest that therapists' differences in gender, age, and theoretical orientation cannot explain any differences in therapeutic factors between individual and group treatment.

To establish interrater reliability, we estimated an intraclass correlation coefficient (Shrout & Fleiss, 1979) for a single rater on the basis of the 100 randomly selected CIQs rated by the two raters. One rater categorized each CIQ using all 28 items of the GCHIS. These items were then collapsed into the four GCHIS components. A second rater classified a random sample of 100 CIQs in the same manner. Interrater reliability was .98 ($p < .01$) for emotional awareness–insight, .99 ($p < .01$) for relationship–climate, .98 ($p < .01$) for other- versus self-focus, and .99 ($p < .01$) for problem definition–change. These coefficients indicate a high level of reliability between raters. For this reason, the ratings from a single judge were deemed appropriate for the subsequent analysis.

Four separate HLMs were used to examine the relationship between type of treatment (individual or group) and the four components of treatment impact (emotional awareness–insight, relationship–climate, other- versus self-focus, and problem definition–change). The means and standard deviations are reported in Table 1. According to the mean scores, the CIQs of this sample reflected emotional awareness–insight, other- versus self-focus, and problem definition–change as slightly to somewhat more characteristic of the treatment sessions. The mean score of relationship–climate indicates a higher overall endorsement of the presence of this component, ranging from somewhat to pretty much.

The mean levels of other- versus self-focus (1.35 vs. 1.34, present study and Kivlighan et al., 1996, respectively) and problem definition–change (1.22 vs. 1.333, present study and Kivlighan et al., 1996, respectively) were almost identical to the mean levels for these scales reported by Kivlighan et al. The mean level of emotional awareness–insight (1.37 vs. 1.65, present study and Kivlighan et al., 1996, respectively) was lower and the mean level of relationship–climate (2.60 vs. 1.77, present study and Kivlighan et al., 1996, respectively) was higher in this study when compared with Kivlighan et al. Clearly, the relationship–climate aspect had more of an impact on the clients in the present study than on the clients in Kivlighan et al.'s study.

The HLM was run four times, once for each component. Each HLM model had two levels, a within-participant and a between-participants model. Because impact ratings were collected over time, the within-participant model was a repeated measure or growth curve model. On the basis of research by Kivlighan and Lilly (1997), we examined a within-participant growth model that consisted of both linear and quadratic components. Therefore, each

HLM model had a gamma coefficient that represented the intercept (average level of a component; e.g., awareness–insight), a gamma coefficient that represented linear slope or linear growth for the component, and a gamma coefficient that represented the quadratic slope or growth for that component.

In each HLM model, a dummy-coded variable represented the source of the data (either from group or individual treatment) and was the between-participants variable of interest. There were three between-participants models in each analysis. The first examined the relationship between treatment type and intercept for a given component. The second examined the relationship between the treatment type and the linear slope. The third between-participants model examined the relationship between the treatment type and the quadratic slope.

Table 2 contains the estimated effects for the growth models for the emotional awareness–insight component of session impact. The examination of the within-participant model for the component of emotional awareness–insight revealed a significant gamma coefficient for the intercept, $t(38) = 22.04, p < .01$. This finding indicated that ratings for the component of emotional awareness–insight were significantly greater than zero for all participants, regardless of treatment modality. For participants as a whole, no linear or quadratic relationship was found. Turning to between-participants models, type of treatment was significantly related to the intercept component, $t(38) = -16.58, p < .01$. This indicated that the critical incident forms for individual treatment participants were more likely to contain aspects of the emotional awareness–insight component than were the critical incident forms of group participants. The gamma coefficients for type of treatment with respect to the linear and quadratic growth terms for the between-participants model indicated no relationship between treatment and growth pattern. In other words, whether a participant was in individual or group treatment was unrelated to the pattern of growth in emotional awareness and insight.

Table 3 contains the estimated effects for the growth models for the relationship–climate component of session impact. The results for the within-participant model for the relationship–climate component revealed a significant gamma coefficient for the intercept, $t(38) = 6.93, p < .01$, indicating a greater than 0 endorsement of the relationship–climate component by all participants, regardless of treatment type. There was no linear change in the relationship–climate component for the sample as a whole. However, the

Table 2

Estimated Effects for the Linear and Quadratic Growth Models and for the Type of Treatment Between-Participants Model for the Emotional Awareness–Insight Dimension of Session Impact

Fixed effect	Coefficient	SE	t ratio
Midtreatment intercept	5.810204	0.263592	22.042***
Type of treatment	−2.707706	0.163320	−16.579***
Linear slope	−0.003873	0.015471	−0.250
Type of treatment	0.006929	0.008548	0.811
Quadratic slope	0.003432	0.002341	1.466
Type of treatment	−0.001664	0.001269	−1.311

Note. $N = 40$ (20 individual and 20 group participants). Type of treatment was coded 1 for individual counseling and 2 for group counseling. *** $p < .01$.

Table 3

Estimated Effects for the Linear and Quadratic Growth Models and for the Type of Treatment Between-Participants Model for the Relationship–Climate Dimension of Session Impact

Fixed effect	Coefficient	SE	t ratio
Midtreatment intercept	1.699039	0.533677	6.931***
Type of treatment	0.677376	0.331582	−2.043**
Linear slope	−0.004422	0.020904	−0.212
Type of treatment	0.008935	0.011546	0.774
Quadratic slope	0.005622	0.003178	1.769*
Type of treatment	−0.003364	0.001725	−1.950*

Note. $N = 40$ (20 individual and 20 group participants). Type of treatment was coded 1 for individual counseling and 2 for group counseling. * $p < .10$ (marginally significant). ** $p < .05$. *** $p < .01$.

gamma coefficient for the quadratic term for the within-participant model was marginally significant, $t(38) = 1.77$, $p < .10$. This indicated that for all of the participants there was a quadratic (U-shaped) pattern on the relationship–climate component over time. Both group and individual participants' critical incident forms had higher levels of the relationship–climate component early and late in treatment when compared with the middle of treatment. For the between-participants model, the type of treatment was significant, $t(38) = -2.04$, $p < .05$. Group treatment participants' critical incident forms were more likely to have the relationship component than were the individual treatment participants' critical incident forms. Also, as noted in Table 3, there was no relationship between the linear trend for relationship and type of treatment. The marginally significant gamma coefficient for type of treatment associated with the quadratic slope term, $t(38) = -1.95$, $p < .10$, indicated that the quadratic pattern was different for clients in individual and group treatment. Specifically, individual clients had a strongly quadratic trend in relationship component across time, whereas group clients had a more flat curve of relationship development. This suggests that the relationship factor is more consistently important across time for clients in group treatment.

Table 4 contains the estimated effects for the growth models for the other- versus self-focus component of session impact. The results for the within-participant model revealed a significant gamma coefficient for the intercept, $t(38) = -9.15$, $p < .01$,

indicating that the intercept was significantly greater than zero for the overall sample. There were no linear or quadratic relationships for the participants as a whole. Examining the between-participants HLM model, we found that type of treatment was only significantly related to the intercept of the other- versus self-focus component, $t(38) = 16.97$, $p < .01$. Participants in group treatment were more likely to identify the other- versus self-focus component in their critical incident forms than were the participants in individual treatment.

Table 5 contains the estimated effects for the growth models for the problem definition–change component of session impact. The results for the within-participant model revealed a significant gamma coefficient for the intercept for the sample as a whole, $t(38) = 18.36$, $p < .01$. This revealed that the problem definition–change component differed significantly from 0 for participants in both treatment types. The gamma coefficient for linear term was marginally significant level, $t(38) = 1.97$, $p < .10$. This indicated that participants increased their ratings of the problem definition–change component over time, regardless of treatment modality. However, no quadratic trends for problem definition–change existed. Type of treatment for the between-participants model was significant only for the intercept term for problem definition–change, $t(38) = -14.11$, $p < .01$. Individual treatment participants' critical incident forms were more likely to contain evidence of problem definition–change impacts than were the critical incident forms of group participants.

Discussion

Unlike other examinations or comparisons of group and individual treatment, this study analyzed the processes within the two treatment formats. Although research has shown that the outcomes of group and individual treatment are comparable (Fuhriman & Burlingame, 1994; McRoberts et al., 1998; Orlinsky & Howard, 1986), little is known about the similarities or differences between the processes in these treatment modalities. The results of this study indicate that there are in fact different factors reflecting different processes that occur in group and individual treatment. We found that the components of relationship–climate and other- versus self-focus are more prominent in group psychotherapy, whereas emotional awareness–insight and problem definition–change are more central to the process of individual treatment.

Table 4

Estimated Effects for the Linear and Quadratic Growth Models and for the Type of Treatment Between-Participants Model for the Other- Versus Self-Focus Dimension of Session Impact

Fixed effect	Coefficient	SE	t ratio
Midtreatment intercept	−1.696343	0.185353	−9.152***
Type of treatment	1.914716	0.112825	16.971***
Linear slope	0.004013	0.022462	0.179
Type of treatment	−0.000082	0.012331	−0.007
Quadratic slope	0.001999	0.003379	0.592
Type of treatment	−0.001297	0.001814	−0.715

Note. $N = 40$ (20 individual and 20 group participants). Type of treatment was coded 1 for individual counseling and 2 for group counseling. *** $p < .01$.

Table 5

Estimated Effects for the Linear and Quadratic Growth Models and for the Type of Treatment Between-Participants Model for the Problem Definition–Change Dimension of Session Impact

Fixed effect	Coefficient	SE	t ratio
Midtreatment intercept	6.476433	0.352766	18.359***
Type of treatment	−3.095032	0.219296	−14.114***
Linear slope	0.024336	0.012351	1.970**
Type of treatment	−0.010482	0.006866	−1.527
Quadratic slope	0.001491	0.001805	0.826
Type of treatment	−0.000859	0.000975	−0.880

Note. $N = 40$ (20 individual and 20 group participants). Type of treatment was coded 1 for individual counseling and 2 for group counseling. ** $p < .05$. *** $p < .01$.

The finding that relationship–climate and other- versus self-focus are central components in group treatment is consistent with our hypothesis that the relational nature of group treatment would lead to the importance of these components. It also follows with Yalom's (1995) theory that other members are the major source of change for group participants. This likely is a contributing explanation of one way in which group treatment is a successful modality of treatment. Because of the interactional and interpersonal nature of both the other- versus self-focus and relationship–climate components, it seems logical that these components would be more prominent in a treatment modality in which greater opportunity exists for interaction and relationship, as with a group setting. Group treatment provides the basis for the development of many relationships for every group member, both between group members and with the therapist(s). Furthermore, because of the presence of other people, each member may experience, through observation and participation, the therapy of other group members in addition to his or her own therapy. Simply put, in a group treatment setting, there are more people to learn from, identify with, disclose to, and with whom to form significant therapeutic relationships. Therefore, it follows that relationship–climate and other- versus self-focus would be more significant in group treatment than in individual treatment.

The finding of the importance of other- versus self-focus in group treatment is consistent with the hypotheses offered by Fuhriman and Burlingame (1990). Three of the specific factors from the GCHIS (universality, altruism, and vicarious learning) included in the other- versus self-focus are the same as those factors that Fuhriman and Burlingame (1990) identified as unique to group treatment. Although this study does not exclusively delineate which factors are unique to a treatment modality, the results indicate that the other- versus self-focus component is more prevalent in group than in individual treatment. Therefore, although Hill (1990) may have been correct that other- versus self-focus factors such as universality may not be unique to group treatment, Mallinckrodt (in press) was also correct that they are indeed more salient in group treatment than in individual.

The results of this study concerning the therapeutic components in individual treatment confirmed our hypothesis that emotional awareness–insight and problem definition–change would be central in this treatment modality. As compared with group treatment, in which relationship is a primary means of treatment, individual treatment often focuses more exclusively on the client's quest to gain personal insight and solve specific problems. Such objectives can well be attained through one-on-one interactions. This may explain why the emotional awareness–insight and problem definition–change components were more salient features of helpful impacts in individual treatment than in group treatment. Fuhriman and Burlingame (1990) reported insight as a factor found in both individual and group treatment, but they do not specify if it is more prominent in one than in the other. We found the emotional awareness–insight component was more prevalent in individual treatment, but it was also a component identified in group treatment, although less often, confirming Fuhriman and Burlingame's (1990) report. Problem definition–change appeared to be only slightly more frequently endorsed for individual treatment, indicating that it is also an important component in both treatment modalities. The identification of emotional awareness–insight and problem definition–change as salient factors in individual treat-

ment is also consistent with the helpful impacts identified by Stiles et al. (1994) and Elliott and Wexler (1994).

It is interesting to note the paucity of findings relative to time in treatment. On the basis of studies of group leadership (Kivlighan, 1997), group climate (Kivlighan & Lilly, 1997), and therapeutic factors (Kivlighan & Goldfine, 1991), we had expected helpful impacts to change over time. The lack of findings for time may be a function of the relatively simple growth models we chose to examine. Perhaps therapeutic impacts do change over time but in a more complex manner than can be modeled by linear or quadratic functions. There was a tendency, particularly in individual treatment, for relationship–climate impacts to be more characteristic of client-reported helpful incidents early and late in treatment when compared with the middle of treatment. Also, problem definition–change impacts tended to increase over time. Schutz's (1958) model of relationship development can explain why relationship impacts have a higher prevalence both early and late in treatment. According to Schutz, in any relationship people must initially address issues of inclusion and then when the relationship is ending, issues of inclusion again become salient. Addressing issues of inclusion early and late in treatment increases the salience of relationship impacts at these times.

It is probably not surprising that problem definition–change impacts had a tendency to increase over time. Beitman (1987) described a four stage model of counseling: (a) engagement, (b) pattern search, (c) change, and (d) termination. According to this model, problem definition–change impacts should be more prevalent in the pattern search and change stages of counseling. Because the pattern search and change stages occur later in counseling, this would account for the linear increase in these impacts over time in treatment. The role of time in the study of therapeutic impacts still remains unclear. Further elucidation of this area would greatly contribute to our understanding of how therapeutic impacts differentially develop in both types of treatment.

Because this study has confirmed that different factors reflecting different processes are present in individual and group treatment, the following question exists: How can two treatment modalities with different processes have equally efficacious outcomes? A possible answer may be the presence of a selection bias. In other words, clients who need relationship or interpersonal impacts choose or are assigned to group treatment, whereas clients seeking personal insight or solutions to problems select or are assigned to individual treatment. If a client knowingly or unknowingly enters a treatment format that includes therapeutic components that address the areas he or she wishes to change, both types of treatment would be equally successful because of the clients' or counselors' bias of selecting the type of treatment that best fits the clients' needs.

There are several limitations that need to be considered when interpreting these results. This analysis only examined the helpful impacts in the treatment session; therefore, no information was provided about the presence or effects of negative session impacts. The treatment that we studied was time limited. We also examined only the process of group and individual treatment, making no comparison to the outcomes of these particular treatment experiences. Although the present study has found different factors in group and individual treatment, without specific comparison of these findings to outcome, there is no definitive way to empirically prove that these differences are relevant to effecting change in therapy. The examination of outcome in conjunction with factors

relative to the two treatment modalities might have provided a basis from which to draw more definite conclusions about the role of therapeutic factors and treatment outcome.

Session impacts were only examined from the perspective of the client. Other methods of measuring session impacts exist, such as considering therapist perspective or the perspective of a trained observer. We selected the use of client generated CIQs, because we were most interested in the clients' perception of the most important factors in treatment. We also believed that the use of trained observers would alter the therapy environment and, therefore, our ability to accurately assess the therapeutic process. It is possible that using a different method of measuring therapeutic factors could yield a different outcome. Two limitations with the sample also exist. First, our sample was fairly homogeneous. Second, our clients were not randomly assigned to treatment groups; therefore, a particular type of treatment may have attracted certain clients.

Whereas previous research has indicated that group and individual treatment have equal levels of efficacy, little is known about the differences or similarities between the two treatment formats. This study shows that different processes exist in the two treatment modalities, with relationship–climate and other- versus self-focus occurring more frequently in group treatment and emotional awareness–insight and problem definition–change occurring more often in individual treatment. These findings highlight a number of important areas in need of research. Additional research could elucidate the complex processes that exist in both individual and group treatment. Future research in this area should include replications of this study or similar studies to attempt to confirm or challenge the relationships between the four components and types of therapies found in this analysis. Later studies may also benefit from adding an outcome component to directly compare the process with the outcome of the two treatment formats as well as an examination of the role of time in therapeutic factors. Given the findings of this study, the major question left to be empirically examined is, how can these two treatment modalities have equally efficacious outcomes while following different therapeutic processes? A possible area to investigate might be the role of selection bias or the client's goals for treatment influencing his or her selection of a particular treatment modality. Further elucidation of the processes of group and individual treatment as well as their relationship with outcome of both formats will not only increase our understanding of the area but will also enable psychologists to more accurately meet the specific needs of their clients.

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