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Discriminating between Cognitive and Supportive Group Therapies for Chronic Mental Illness

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Abstract

This descriptive and comparative study employed a Q-sort process to describe common factors of therapy in two group therapies for inpatients with chronic mental illness. While pharmacological treatments for chronic mental illness are prominent, there is growing evidence that cognitive therapy is also efficacious. Groups examined were part of a larger study comparing the added benefits of cognitive versus supportive group therapy to the treatment milieu. In general, items described the therapist's attitudes and behaviors, the participants' attitudes and behaviors, or the group interactions. Results present items that were most and least characteristic of each therapy and items that discriminate between the two modalities. Therapists in both groups demonstrated good therapy

skills. However, the cognitive group was described as being more motivated and active than the supportive group, indicating that the groups differed in terms of common as well as specific factors of treatment.

Keywords: severe mental illness, common factors, treatment process, psychiatric rehabilitation, cognitive therapy

Cognitive impairments have been seen as key characteristics in schizophrenia and other chronic mental illnesses since the time of Bleuler (1911/1950). More recently, cognitive-based treatments for schizophrenia and other chronic mental illnesses have been developed. Much of this research involves specific cognitive impairments that were detected in the laboratory and then targeted for change, such as attentional deficits and difficulties with conceptual flexibility (see Corrigan and Storzach, 1993; Reed et al., 1992; Spaulding et al., 1986; Storzach and Corrigan, 1996). This approach, termed the cognitive process targeting approach (Twamley et al., 2003), is a key component of integrated psychological therapy (IPT; Brenner et al., 1992, 1994), a comprehensive psychosocial treatment modality.

Integrated psychological therapy is a highly structured group therapy approach consisting of five sections that address various aspects of social behavioral functioning. The first three sections make up the cognitive component of this treatment: cognitive differentiation, social perception, and verbal communication. In each of these sections, the patients participate in a series of graduated group activities designed to exercise specific cognitive abilities. The final two sections focus on social skills and interpersonal problem solving. Overall, it appears that IPT produces a benefit when compared with less extensive psychosocial treatments (Brenner et al., 1992; Heim et al., 1989; Kraemer et al., 1987; van der Gaag, 1992).

In a more recent study, Spaulding et al. (1999) specifically examined a modified version of the cognitive component of IPT (cognitive differentiation, social perception, and verbal communication sections) in comparison to a supportive group focused on maintaining and enhancing personal and social functioning as part of a standard rehabilitation regimen for a population of patients with schizophrenia and other chronic, severe, and disabling psychiatric disorders. This study found that patients in both the supportive and the IPT groups showed improvement. However, patients in the IPT groups showed greater gains in social competency, psychotic disorganization, and attentional processing. The supportive group was designed as an active treatment condition that contained the nonspecific elements of IPT to test the added benefit of the cognitive treatment to the treatment milieu.

The specific elements of treatment differed between the IPT group (i.e., focus on cognitive exercises) and the supportive group (i.e., focus on social cooperation and understanding). While it is likely that these specific elements contribute to the differences between the groups on the outcome variables, the groups may also differ on common factors. In 1936, Rosenzweig (1936) first noted that various forms of psychotherapy may be equally efficacious because of factors common to all techniques rather than the techniques themselves. Today, common factors of treatment are seen as essential components of the therapeutic process in all types of psychotherapy (Wampold, 2001); however, there have been numerous uses of the term *common factors*. For the purpose of this study, we are defining common

factors as those aspects of treatment that are not specific to a given intervention. For example, under our definition, the in-session activity level of clients would be considered a common factor since many treatments could be characterized as having active client participation. However, having an active treatment is separate from, although possibly related to, the specific treatment components. Therefore, active participation would be considered a common treatment factor.

The difficulty in addressing questions about common factors is that so few procedures have been developed to measure common factors quantitatively across therapy modalities. One way of investigating the differences in these common factor elements is to use a measure similar to Jones' Psychotherapy Process Q-sort (PQS; Jones, 1985). Q-sort instruments involve items being sorted into a forced distribution allowing for a quantitative evaluation of characteristic and uncharacteristic items. The Q-sort procedure has the benefit of utilizing direct measurement from audiotaped or videotaped records of actual sessions. In the case of the PQS, the items represent statements about the therapy process. The PQS has been used to compare psychodynamic and cognitive-behavioral therapies for depression (Jones and Pulos, 1993) as well as to examine therapeutic factors for inpatients and outpatients receiving group treatment of schizophrenia (González de Chávez et al., 2000). Since the current study is designed to be descriptive, the use of an adapted PQS procedure allows for a quantitative method to describe the relative similarities and differences between the IPT and the supportive groups.

To understand better the treatment effects seen in the Spaulding et al. (1999) outcome study, it is essential to understand all differences between the groups. Based on the outcome study, we know that there were difference between the cognitive and the supportive groups in terms of outcome. Additionally, all therapists demonstrated fidelity to the respective treatment manuals. However, we do not know the extent to which these two treatments also differed on common factors. Before outcome can be attributed to the specific treatment elements, other potential differences need to be ruled out. The purpose of this study was to illustrate any additional differences between these two established treatment modalities. This descriptive study uses the Q-sort method to describe how the IPT group and the supportive group compared across common elements of the psychotherapeutic process in a group treatment of patients with chronic mental illness. We did not have specific expectations about the various constructs in this exploratory study but were instead interested in the common factor differences between the two groups in this understudied population.

Methods

Participants

The data presented here are from the first three (of eight) 6-month cohorts of a study of the effectiveness of cognitive therapy for a chronic inpatient population (Spaulding et al., 1999). Please see Spaulding et al. (1999) for the inclusion and exclusion criteria for the larger study. Table 1 presents the demographic and clinical characteristics of this sample.

Table 1. Demographic Information and Clinical Characteristics of the Sample

	Cognitive (N = 18)	Supportive (N = 19)	Group <i>t</i> or χ^2 (<i>p</i>)
Age, mean (<i>SD</i>)	35.18 (10.62)	36.23 (12.27)	0.28 (NS)
Education, mean (<i>SD</i>)	11.83 (2.46)	12.10 (2.10)	0.36 (NS)
Gender (men/women)	9/9	9/10	0.03 (NS)
Ethnicity			1.34 (NS)
European-American	16	17	
African-American	1	2	
Hispanic	1	0	
Diagnosis			9.36 (NS)
Schizophrenia, paranoid	8	6	
Schizophrenia, undifferentiated	4	7	
Schizophrenia, disorganized	2	1	
Schizoaffective disorder	0	4	
Other ^a	3	1	
Global Assessment Scale, mean (<i>SD</i>)	36.88 (9.26)	37.16 (8.33)	0.09 (NS)
PANSS positive symptoms, number rated "severe," mean (<i>SD</i>)	1.53 (1.33)	1.63 (1.46)	0.22 (NS)
PANSS negative symptoms, number rated "severe," mean (<i>SD</i>)	1.29 (1.21)	1.26 (1.28)	0.07 (NS)
Antipsychotic medication CPZ equivalent (mg/d), mean (<i>SD</i>)	1920.18 (2271.78)	1996.71 (1932.46)	0.11 (NS)

a. Other = psychosis NOS, organic personality disorder, personality disorder NOS (cognitive), major depression (supportive).

Procedure

Treatments

This study was completed as part of a large-scale study of treatment efficacy. Each participant, after giving his or her informed consent, was randomly assigned to either a cognitive therapy group or a supportive-attention control group. Treatment lasted for 6 months and occurred three times per week. A therapist trained in the cognitive therapy modalities led the cognitive therapy cohorts while three therapists trained in generalized supportive modalities conducted the cohorts of supportive-control therapy. All therapists had received treatment manuals that described how their modality was to be conducted. To assess treatment fidelity, pairs of graduate students rated 10 tapes from each modality on a 5-point Likert scale with higher numbers indicating better adherence to the cognitive treatment manual. As expected, cognitive group sessions were highly adherent to the cognitive manual ($M = 4.80$), whereas the supportive group sessions contained few elements from the cognitive manual ($M = 0.21$; Elting et al., 1992).

Cognitive Therapy Groups

The cognitive therapy groups were designed to address specific social information processing deficits. The cognitive therapy was based on the cognitive subprograms (cognitive differentiation, social perception, and verbal communication) of IPT (Brenner et al., 1992,

1994). A cognitive therapy manual (Spaulding and Reed, 1989) outlined 18 specific exercises that formed the core of the cognitive rehabilitation therapy. The therapist of the IPT group was instructed to introduce the group activity, guide the participants, and evaluate participants' responses as well as to facilitate social interactions among the group. The cognitive differentiation subprogram focused on concept manipulations. The social perception subprogram focused on the processing of social information. The verbal communication subprogram focused on the cognitive substrates of verbal interactions, including attention and short-term memory.

Supportive Therapy Groups

The supportive therapy groups were based on a generic modality used to maintain or enhance personal and social functioning among chronic schizophrenia patients. The supportive manual (Spaulding, 1989), designed specifically for the larger study, combined the nonspecific aspects of the IPT manual as well as procedures adopted from accounts of supportive group therapy work with patients with chronic schizophrenia. The supportive therapy manual described the assumptions and goals of supportive therapy (e.g., fostering and maintaining improvements in social functioning), the general context and conditions of therapy, and the role of the therapist in detail.

In the supportive therapy groups, therapists introduced the group as an exercise in social cooperation and understanding where patients were going to learn to help each other. There was no set agenda for these groups; group members were encouraged to bring in recent experiences, problems, and concerns for group discussion. The therapists in the supportive groups were social workers with extensive experience in supportive group therapy.

Treatment Outcomes

The larger treatment study (Spaulding et al., 1999) compared the efficacy of cognitive therapy and supportive therapy as components of a standard treatment regimen. Overall, individuals in the cognitive group therapy showed significantly greater improvement on the primary outcome measure, the Assessment of Interpersonal Problem-Solving Skills (Donahoe et al., 1990). Effect sizes for the supportive group ranged from .34 to .46 and from .58 to .91 for the cognitive group. Those in the cognitive group therapy demonstrated greater improvement in terms of attentional processing and the disorganization factor of the Brief Psychiatric Rating Scale (Ventura et al., 1993). Overall, participants in both groups showed improvement on measures of attention, memory, and executive functioning.

Tapes Selected

For this study, each cohort was split into 2-week treatment periods. Out of each 2-week period, one session of each type of therapy was randomly chosen to rate with the Q-sort measure. This resulted in a total of 66 tapes being rated, 34 of which were tapes of the cognitive modality and 32 of which were tapes of the supportive-control modality. With this sample size, an effect size of .35 would yield a power of .80 and an α of .05 (Friedman, 1982). Effect sizes reported in this paper were .43 or greater, indicating that the sample size was large enough to detect this size of an effect.

Measures

For this study, the PQS (Jones, 1985) was adapted to assess common factors occurring in the cognitive and supportive group therapies by a team led by two doctoral level psychologists (D. Hope and W. Spaulding) with experience in treatment outcome research. A Q-sort instrument was chosen since it allows for a descriptive, yet quantitative, method for comparing relative similarities and differences across groups. Using Jones' instrument as a basis, the research team began the process of adapting items, devising new items, and deleting others to develop a suitable instrument for use in a group therapy format. The items were classified as one of three types: those which describe the therapist's attitudes and behaviors, those which describe the participant's attitudes and behaviors, and those which describe the interactions of the group. Initial piloting of the instrument and reliability analysis resulted in some modifications and revisions, leaving 80 items that were determined to be suitable for the final Q-sort measure. A nine-category Q-sort was used with ratings ranging from 1, representing most characteristic of the session, to 9, representing least characteristic of the session. Research assistants were first instructed to sort the items into three piles: characteristic, uncharacteristic, and neutral. Then they sorted the three piles into the nine categories. The item distribution agreed upon for the nine categories was as follows: 3, 6, 10, 13, 16, 13, 10, 6, 3.

Reliability

For each tape rated, a minimum of two trained graduate student research assistants were asked to complete separate Q-sort ratings to determine interrater reliability. The average intraclass correlation was 0.73 (McGraw and Wong, 1996).

Coding of Items

Two graduate students (separate from those who completed the Q-sort; one the first author, the second blind to the study's purpose) classified the 80 Q-sort items into those that represented common factors and those that represented specific factors. Common factors were considered those characteristics that would be expected to be consistent across treatment modalities. The intraclass correlation was .83 (McGraw and Wong, 1996). A total of 28 items were determined to represent specific factors of treatment (i.e., "The therapist focuses on the causal antecedents of group members' disputes") and were deleted from further analysis.

Results

Results are presented first as Q-sort items that were most and least characteristic of cognitive therapy and of supportive therapy. Then, items that discriminate between the two treatment modalities are discussed. In the description that follows, Q-sort item numbers correspond to the numbers in Tables 2 to 4. Mean item ratings range from 2.07 to 7.87 for the cognitive therapy group and from 2.91 to 7.66 for the supportive therapy group.

Cognitive Therapy: Most and Least Characteristic Q-Sort Items

Most and least characteristic items for the cognitive therapy modality are presented in Table 2. In general, group members in the cognitive group were attentive (Q-sort item 65; Q 65), employed humor (Q 79), and were accepting of the therapist's comments (Q 76) without verbalizing negative feelings toward the therapist (Q 62). The group members did not appear withdrawn or aloof (Q 72), nor did they resist participation in group activities (Q 78). Group members did not appear to have difficulty understanding or responding to questions (Q 63). The group activities were not dominated by one or a few group members (Q 52). In facilitating the cognitive groups, the therapist was observed to employ positive feedback to facilitate group members' speech (Q 3) while conveying a sense of nonjudgmental acceptance (Q 56). In doing so, the therapist helped clarify group members' comments (Q 5); however, she did not push group members beyond their emotional comfort level (Q 27). As the therapist facilitated the sessions, she addressed the group members by their first names (Q 2) without being more positively inclined to certain group members (Q 44). The therapist tended to communicate in a clear and coherent style (Q 19) with an emphasis on the positive (Q 7). The therapist was described as being confident and self-assured (Q 46) without appearing superficially enthusiastic (Q 21), condescending or patronizing (Q 25), or aloof so to avoid emotional expressiveness (Q 39).

Table 2. Most and Least Characteristic Q-Sort Items for Cognitive Therapy^a

Item	Description	M (SD)
Ten most characteristic items		
2	T uses first names	2.07 (0.49)
46	T is confident and self-assured	2.20 (0.65)
19	T communicates in a clear, coherent style	2.44 (0.50)
5	T helps to clarify GMs' comments	2.65 (0.82)
7	T emphasizes the positive when giving feedback to GMs	2.68 (0.55)
3	T employs positive feedback to facilitate GMs' speech	2.88 (0.97)
56	T conveys a sense of nonjudgmental acceptance of GMs	2.90 (0.72)
65	GMs are attentive	3.07 (0.46)
76	GMs are accepting of the T's comments, observations, and guidance	3.79 (0.59)
79	GMs employ humor	3.93 (0.78)
Ten least characteristic items		
25	T condescends to or patronizes the GMs	7.87 (0.75)
39	T appears aloof and avoids emotional expressiveness	7.87 (0.88)
44	T calls on, or is more positively inclined toward, certain GMs	7.68 (0.58)
52	One or a few GMs dominate group activity	7.57 (0.90)
21	T has a superficial enthusiasm that appears disingenuous	7.25 (0.87)
27	T pushes GMs beyond their level of emotional comfort	7.00 (0.85)
72	Three or more GMs are withdrawn or aloof	6.81 (1.03)
62	GMs verbalize negative feelings toward therapist	6.62 (0.90)
78	GMs resist participation in group activities	6.50 (0.89)
63	Individual GMs have difficulty understanding or responding as indicated by long response latency or lack of response to a direct question	6.50 (0.59)

a. Endpoints are most characteristic (1) and least characteristic (9). T = therapist; GM = group members.

Supportive Therapy: Most and Least Characteristic Q-Sort Items

Most and least characteristic items for the supportive therapy modality are presented in Table 3. In the supportive groups, group members were animated or excited (Q 66) and did not verbalize negative feelings toward the therapist (Q 62). In these groups, the activities tended to be dominated by one or a few group members (Q 52) while one or more group members were withdrawn or aloof (Q 72; Q 73). In facilitating the supportive groups, the therapists used self-disclosure to assist group members' coping efforts (Q 47), emphasized commonalities of experiences among group members (Q 32), and helped to clarify group members' comments (Q 5), without pushing group members beyond their level of emotional comfort (Q 27) or clarifying the purpose of therapy (Q 26). The supportive group therapists did not comment on the "group process" (Q 30). The therapists appeared to be confident and self-assured (Q 46), yet aloof and avoidant of emotional expressiveness (Q 39). They did not encourage lower functioning group members to respond first (Q 18), nor did they call on or were they inclined toward certain group members (Q 44). The therapists did not selectively respond to group members' contributions (Q 8). Therapists used group members' first names (Q 2) and communicated in a clear and coherent style (Q 19). They were unlikely to provide nonjudgmental responses that were more than simple rephrasing of group members' behavior (Q 6); however, it was more characteristic for them to use judgmental connotations during feedback (Q 20).

Table 3. Most and Least Characteristic Q-Sort Items for Supportive Therapy^a

Item	Description	M (SD)
Ten most characteristic items		
47	T uses self-disclosure of thoughts to assist GMs in their coping efforts	2.91 (0.87)
32	T emphasizes commonalities of experience among GMs	3.02 (1.20)
46	T is confident and self-assured	3.06 (0.59)
2	T uses first names	3.25 (1.39)
19	T communicates in a clear, coherent style	3.41 (0.78)
5	T helps to clarify GMs' comments	3.76 (1.38)
52	One or a few GMs dominate group activity	3.80 (2.56)
73	One or two GMs are withdrawn or aloof	3.92 (1.26)
72	Three or more GMs are withdrawn or aloof	4.28 (2.02)
39	T appears aloof and avoids emotional expressiveness	4.66 (1.97)
Ten least characteristic items		
18	T encourages lower functioning GMs to respond first	7.66 (1.19)
20	T avoids judgmental connotations in feedback	7.17 (0.91)
27	T pushes GMs beyond their level of emotional comfort	7.00 (1.61)
6	T provides nonjudgmental responses that are more than simple rephrasing or clarifications to GMs' verbal and nonverbal behavior	6.34 (1.61)
30	T comments on the "group process"	6.12 (0.83)
66	GMs are animated or excited	5.98 (0.76)
8	T selectively responds to positive contributions by GMs	5.98 (0.76)
44	T calls on, or is more positively inclined toward, certain GMs	5.95 (1.70)
26	T clarifies and explains the purpose of the therapy	5.88 (2.07)
62	GMs verbalize negative feels toward T	5.72 (1.38)

a. Endpoints are most characteristic (1) and least characteristic (9). T = therapist; GM = group members.

Differences in the Therapy Process Across the Two Treatment Modalities

Each of the 52 common factor items of the Q-sort was submitted to a one-way analysis of variance test to compare the mean of each item for cognitive versus supportive therapy. Differences between the two treatment modalities are presented in Table 4. Using a Bonferroni correction for α inflation ($.05/52 = .001$), a p value less than 0.001 was considered significant. Overall, there were 30 items with significant differences between the groups. Of these items, 16 were more characteristic of cognitive therapy and 14 were more characteristic of supportive therapy. Below is a summary of the relative differences between the two groups for items that have large effect sizes ($\eta = .50$).

The cognitive therapy group was more likely to have a therapist who communicated in a clear, coherent style (Q 19) and was confident and self-assured (Q 46). When interacting with group members, the therapist in the cognitive group was more likely to emphasize the positive when giving feedback (Q 7), to employ positive feedback to facilitate group members' speech (Q 3), to convey a sense of nonjudgmental acceptance of group members (Q 56), to respond selectively to positive contributions by group members (Q 8), and to use first names (Q 2). In the cognitive therapy group, the group members were more likely to be attentive (Q 65); animated or excited (Q 66); motivated to participate in group activities (Q 68); and accepting of the therapist's comments, observations, and guidance (Q 76).

On the other hand, the supportive therapy group was more likely to have therapists described as aloof and avoiding emotional expressiveness (Q 39), as condescending or patronizing to group members (Q 25), and as having superficial enthusiasm that appeared disingenuous (Q 21). When interacting with group members, the therapists in the supportive group were more likely to emphasize commonalities of experience among group members (Q 32) and to use self-disclosure of thoughts to assist group members in their coping efforts (Q 47). In terms of group dynamics, it was more characteristic for the therapists to call on certain group members (Q 44) and for group activities to be more likely to be dominated by one or a few group members (Q 52) while three or more group members appeared withdrawn or aloof (Q 72). Group members were more likely to have difficulty getting started in group activities (Q 60) and were more likely to resist participation in group activities (Q 78).

Table 4. Differences in the Therapy Process across Cognitive and Supportive Therapies^a

Item	Description	Cognitive <i>M (SD)</i>	Supportive <i>M (SD)</i>	η
More characteristic of cognitive therapy				
7	T emphasizes the positive when giving feedback to GMs	2.68 (0.55)	5.42 (1.68)	.75
65	GMs are attentive	3.07 (0.46)	4.83 (1.32)	.67
76	GMs are accepting of the T's comments, observations, and guidance	3.79 (0.59)	5.09 (0.88)	.66
3	T employs positive feedback to facilitate GMs' speech	2.88 (0.97)	5.17 (1.62)	.66
56	T conveys a sense of nonjudgmental acceptance of GMs	2.90 (0.72)	5.31 (1.88)	.66
68	GMs are motivated to participate in group activities	4.10 (0.66)	5.31 (0.84)	.63
8	T selectively responds to positive contributions by GMs	4.56 (1.07)	5.98 (0.76)	.61
19	T communicates in a clear, coherent style	2.44 (0.50)	3.41 (0.78)	.60
46	T is confident and self-assured	2.20 (0.65)	3.06 (0.59)	.57
66	GMs are animated or excited	4.50 (1.00)	6.11 (1.54)	.53
2	T uses first names	2.07 (0.49)	3.25 (1.39)	.50
18	T encourages lower functioning members to respond first	6.13 (1.50)	7.66 (1.19)	.49
71	GMs interact in a cooperative manner	4.03 (0.77)	4.95 (1.06)	.45
5	T helps to clarify GMs' comments	2.65 (0.82)	3.76 (1.38)	.45
45	T employs humor in the therapy sessions	4.01 (0.62)	5.09 (1.43)	.45
30	T comments on the "group process"	5.38 (0.66)	6.12 (0.83)	.45
More characteristic of supportive therapy				
39	T appears aloof and avoids emotional expressiveness	7.87 (0.88)	4.66 (1.97)	.73
32	T emphasizes commonalities of experience among GMs	5.04 (0.79)	3.02 (1.20)	.71
52	One or a few GMs dominate group activity	7.57 (0.90)	3.80 (2.56)	.71
25	T condescends to or patronizes the GMs	7.87 (0.75)	5.22 (2.00)	.67
47	T uses self-disclosure of thoughts to assist GMs in their coping efforts	4.81 (1.26)	2.91 (0.87)	.66
21	T has a superficial enthusiasm that appears disingenuous	7.25 (0.87)	5.59 (1.06)	.66
72	Three or more GMs are withdrawn or aloof	6.81 (1.03)	4.28 (2.02)	.63
60	GMs have difficulty getting started in group activities	6.40 (0.91)	4.83 (1.16)	.61
44	T calls on, or is more inclined toward, certain GMs	7.68 (0.58)	5.95 (1.70)	.57
78	GMs resist participation in group activities	6.50 (0.89)	5.34 (1.06)	.52
73	One or two GMs are withdrawn or aloof	5.44 (1.51)	3.92 (1.26)	.48
63	GMs have difficulty understanding or responding as shown by long response latency or lack of response to a direct question	6.50 (0.59)	5.58 (1.06)	.48
80	GMs express angry or aggressive feelings	6.24 (1.12)	4.91 (1.46)	.46
67	GMs are provocative: they test the limits of group membership versus compliant with normal expectations of group behavior	6.26 (1.06)	5.33 (0.90)	.43

a. Endpoints are most characteristic (1) and least characteristic (9). T = therapist; GM = group members; η = effect size. Significant differences between Q-sort item means were obtained by one-way analyses of variance; $df = 1, 64, p < 0.001$.

Discussion

This study sought to examine the psychotherapeutic process in treatment of inpatients diagnosed with chronic mental illness by employing a modified version of the PQS to compare cognitive group therapy to supportive group therapy. In particular, this study sought to examine the common rather than the specific factors in each therapy modality. Groups examined for this study were part of a larger study (Spaulding et al., 1999) comparing the added benefits of cognitive versus supportive group therapy to the treatment milieu. The larger study found patients in both groups benefited from the treatments, while patients in the cognitive group showed more improvement. In the larger study, the supportive group was designed specifically to provide all of the common elements and none of the specific elements of the cognitive therapy group. Thus, the two groups were designed to differ only in specific factors. The strong treatment fidelity observed in the groups indicates that the groups were conducted as expected and that the specific treatment factors differed between the groups. As would be expected, therapists in both groups used good therapeutic skills such as referring to group members by their first names and keeping group members within their level of emotional comfort. It is worth noting that the majority of items listed as least characteristic for both groups were items that countered good therapy practice. Since these items were least characteristic of the groups, this may indicate that all therapists used good therapy skills.

When examining the 10 most and least characteristic items for the cognitive and supportive therapy groups there were 10 items in common: four on both most characteristic lists, three on both least characteristic lists, and three on the most characteristic list for the supportive group and the least characteristic list for the cognitive group. Most items that were consistent across groups, either characteristic in both or uncharacteristic in both, were items describing basic therapeutic skills such as communicating in a clear way and clarifying group members' comments without being more inclined to certain group members. Also, group members were not verbalizing negative feelings toward the therapists in either group.

Interestingly, three items were most characteristic of the supportive group and least characteristic of the cognitive group. In the supportive group, one or a few group members' dominated the group activity, while three or more appeared withdrawn or aloof. Also, the therapists in the supportive groups appeared aloof and avoidant of emotional expressiveness. Taken together, these items indicate that both therapists and group members appeared to take a more active role in the cognitive groups. This distinction is also apparent when looking at the significant differences between the groups. While this may relate to the structure of the groups (i.e., the cognitive group had a strict agenda to follow, while the supportive group did not), it could also be characterized as a common factor under our definition. Client participation and involvement in therapy is viewed as an important common factor variable (Tallman and Bohart, 1999). Both Garfield (1994) and Orlinsky et al. (1994) reviewed several studies that show the importance of client involvement for positive outcome. Therefore, if group members are more actively involved in the session, then they may be more likely to benefit from the group than if they are less involved

regardless of the specific treatment elements. Therefore, it could be that involvement in the group, regardless of the type of group, benefits therapeutic outcome.

Overall, it seems that items more characteristic of cognitive therapy were more positive than items more characteristic of supportive therapy. However, just because an item was rated more characteristic of the cognitive group does not indicate that it occurred frequently; rather, it indicates that it was more characteristic in the cognitive group. None of the items more characteristic of cognitive therapy were negative; however, several of the items more characteristic of supportive therapy were negative. For example, supportive group members appeared more aloof or resisted participation, and the therapist was more likely to be described as condescending or disingenuous. In the larger treatment study, members of the cognitive group benefited more than members of the supportive group. While this may be attributed to specific factors, there also appear to be some common factor differences. Mainly, the characteristics of the cognitive group appear to be more positive than the characteristics of the supportive group. Therefore, it may be that the more positive attitude and the higher levels of motivation observed in the cognitive group may contribute to the greater benefit of this group. At the same time, the specific cognitive group activities are likely to contribute to the group differences. It is easier to be actively involved in a group consisting of structured activities. While not examined in this study, there may be differences among individual therapists that could affect the differences between the groups; however, there were no differences among therapists in terms of treatment fidelity. Clients from both groups showed added benefit from the groups. Therefore, being part of a group based on common factors of therapy also led to improvement over pretreatment status. The addition of a no group condition would allow for the comparison of the common factors supportive group to no treatment to determine the benefit from the supportive group.

This study was an initial attempt to describe additional characteristics of treatment of individuals with chronic mental illness. Although we have described the group process, we cannot make causal statements regarding which elements were responsible for the superior outcome of the cognitive modality. It appears that therapists in both groups exhibited good therapeutic skills; however, cognitive group members appeared more motivated and active in group activities than those in the supportive group. Additionally, therapist factors such as therapist responsiveness to clients were not specifically studied here. Future research should explore the relationship between treatment process and outcome for various cognitive training approaches. For example, it may be that a treatment based on specific factors invokes superiority on common factors as well; therefore, it is unclear whether the superiority of one treatment over another is driven by common factors, specific factors, or their combination. Additionally, this study illustrates the feasibility of examining process questions within standard treatments for individuals with chronic mental illness.

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