

A Preliminary Report of Short-Term Cognitive-Behavioral Group Therapy for Inpatients With Personality Disorders

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A randomized, controlled study evaluated the effectiveness of a cognitive-behavioral therapy group, based on Linehan's dialectical behavior therapy, for inpatients with personality disorders. The treatment, a problem-solving skills group focused on parasuicidality, was compared with a discussion control group. Change was assessed by self-report measures and behavioral observations on the unit. Subjects in both groups improved significantly on most change measures, although no significant between-group differences were found. However, the treatment group patients viewed the intervention as more beneficial to them in their lives outside the hospital. The usefulness of this type of group on a short-term unit is discussed.

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Patients with borderline personality disorder (BPD) constitute an estimated 10%-25% of all inpatient psychiatric admissions.¹ Inpatient staff are challenged and often discouraged by working with patients with BPD. These patients' characteristic behaviors, particularly their anger and difficulties in interpersonal functioning,² often provoke angry and rejecting responses in staff.³⁻⁵ This in turn exacerbates the patients' anger and demandingness, and an escalating and self-perpetuating cycle begins. There is a need for effective inpatient treatments for these patients.⁵⁻⁷ Although various aspects of such treatment, such as establishing treatment contracts, preventing regression, and using medications, have been described recently (see Miller⁸ for a review), little has been discussed concerning the specifics of inpatient group therapy for BPD or other personality disorder patients.

The lack of research on inpatient groups for these patients is surprising; group therapy

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has been widely practiced on inpatient psychiatric units for decades,⁹ and personality disorder patients constitute a large percentage of inpatients. Group therapy could be a valuable treatment modality for these patients, permitting their difficulties in interpersonal functioning to be observed directly within a group and therefore to be addressed more directly and quickly than in individual therapy.¹⁰ This could be especially beneficial as the lengths of psychiatric hospitalizations decrease.¹¹

A number of important contributions have enlarged the clinical and theoretical literature on inpatient groups for personality disorders;^{9,10,12,13} however, the empirical literature is sparse. To our knowledge, only one published treatment outcome study has been conducted exclusively with inpatients with diagnoses of personality disorder.¹⁴

Although several controlled outcome studies of inpatient group therapy have included personality disorder patients, these patients were not studied as a separate group.¹⁵⁻¹⁷ These studies, in general, found that insight-oriented groups have little or no therapeutic value on an acute care or short-term inpatient ward. In contrast, Coché and Douglas¹⁸ found that a cognitively oriented problem-solving group may be of some value. However, it was unclear whether this problem-solving group was any more beneficial than a playreading "placebo" group; further, the diagnoses of the patients were not specified.

Recently, Barley et al.¹⁴ demonstrated the effectiveness of inpatient cognitive-behavioral group psychotherapy compared with a control condition. Barley and colleagues transformed their personality disorders unit into a dialectical behavior therapy^{19,20} (DBT) unit with treatment centered on three separate DBT groups that each patient attends. Groups are organized around a 3-month cycle, with an average length of hospitalization of 106 days. Preliminary research findings showed a significant decrease in parasuicidity (self-mutilative and suicidal behaviors) among patients on the DBT unit when compared with patients hos-

pitalized on the same unit before the program was instituted and during its initiation. When contrasted with a general psychiatry unit on which DBT was not practiced, the rate of parasuicides on the general unit did not differ over a similar time.

Linehan^{19,20} has developed a comprehensive outpatient treatment program for patients with BPD that has been adapted by others for inpatient use.^{14,21} The goal of Linehan's DBT model is to decrease the patient's maladaptive, self-destructive behaviors and increase his or her repertoire of more effective ways of coping with intense affects and interpersonal difficulties. DBT follows a psychoeducational format that focuses on skill acquisition in four areas: mindfulness (nonjudgmental acceptance of the experience of the moment), regulation of emotion, interpersonal effectiveness, and distress tolerance. DBT focuses on enabling the individual to accept her feelings without judging them and to differentiate feelings from actions so that intense affects do not translate into feeling out of control of one's behaviors.

Linehan et al.²² conducted a controlled, randomized study of the effectiveness of DBT for severely dysfunctional, chronically parasuicidal female outpatients with borderline personality disorder. They compared 22 women assigned to DBT with 22 women assigned to a control condition of treatment as usual in the community. The DBT condition included 1 year of weekly individual therapy and a weekly skills group. There were four assessment points, at pretreatment and at 4-month intervals throughout the year. Linehan et al. found significantly greater improvement in the DBT patients toward decreased parasuicidity, decreased medical risk of parasuicides, increased continuation in therapy, and decreased inpatient days. No between-group differences were demonstrated on measures indicative of internal experiences (depression, hopelessness, suicidal ideation, and reasons for living). Patients in both groups showed improvement on these measures. The results of this study are impressive in light of the small sample size, and the researchers

conclude that the study demonstrates a treatment effect. A recent follow-up study found that DBT subjects maintained improvement in some of these areas at 6-month and 12-month posttreatment intervals.²³

Linehan and her colleagues^{22,23} demonstrated the effectiveness of year-long DBT for outpatient women with borderline personality disorder. Barley et al.¹⁴ demonstrated DBT's effectiveness on an inpatient unit where the average length of stay was over 3 months, and they extended Linehan's findings to include both male and female inpatients with various personality disorders, not only BPD.

The purpose of the present study was to examine whether DBT could be successfully modified for a short-term inpatient setting with an average stay of less than 2 weeks and show positive results. This study also explored whether DBT could be applied to a less homogeneous patient population than that of Linehan and colleagues,^{22,23} one that included patients with other personality disorders in addition to BPD and that included men as well as women.

A modified version of the DBT skills training group, the Creative Coping (CC) group, had been in existence on the unit for 2 years before the research began. A discussion group, the Wellness and Lifestyles (W&L) group, was developed as a control group. Personality disorder patients who consented to the study were assigned to one or the other group by a paired randomization procedure.

The first set of hypotheses addressed replication of the findings of Linehan et al.²² It was predicted that the areas in which they found no between-group differences (depression, hopelessness, and suicidal ideation) would be replicated in an inpatient sample. The second set of hypotheses addressed areas where differential change was expected. It was predicted that CC group subjects would demonstrate greater change in areas addressed in that group: mindfulness, emotion regulation, interpersonal effectiveness, and distress tolerance. Specifically, 1) CC subjects should become less angry than control sub-

jects because dealing with anger is a major focus of the CC group; 2) CC subjects should come to feel more control over their external surroundings, particularly in their relationships with others, and this should be evident in a change in locus-of-control toward a more internal orientation; 3) CC group subjects should demonstrate behavioral improvement through fewer self-injurious or treatment-undermining behaviors while on the inpatient unit when compared with control subjects; and 4) CC subjects should better learn the lessons of the group regarding regulation of emotion, interpersonal effectiveness, and distress tolerance than W&L subjects. Although it is not possible without the results of a post-discharge follow-up study to determine whether patients apply the lessons of the group to their lives outside the hospital, it should be possible to determine whether subjects cognitively apprehend the lessons taught in the group during their hospital stay. A questionnaire was designed to assess this knowledge. Exploratory research questions were designed to evaluate whether and in what ways subjects felt that they benefited from the groups.

METHODS

Subjects

Subjects were recruited from among adults admitted to a general inpatient psychiatric unit at a university hospital. Exclusionary diagnostic criteria were the following: schizophrenia, chronic psychosis, organic brain damage, mental retardation, mania, or eating disorder. (For patients with eating disorder, a separate treatment protocol was followed.) Patients scheduled for electroconvulsive therapy or for very brief hospitalizations that would result in fewer than four group sessions were not approached. Patients who had participated in the unit's CC group during a previous hospitalization within the past year were also excluded.

Of the 31 subjects in the study, 21 (67.7%) were female and 10 (32.3%) were male. The

mean age ($\pm$ SD) was 31.4 ± 9.24 years. On average, the subjects' socioeconomic status, according to Hollingshead's index,²⁴ was Level III; the mode was Level IV. A subsample of 13 subjects met diagnostic criteria for borderline personality disorder by scoring greater than 70 on the Millon Clinical Multiaxial Inventory, Version II²⁵ (MCMI-II). Nine of the BPD subjects (69.2%) were female and 4 (30.8%) were male; the mean age was 31 ± 9.85 . BPD subjects did not differ from the entire sample in mean socioeconomic status. Additional demographic information on subjects' race, religion, education, and marital status for the entire sample and for the BPD subsample is reported in Table 1.

Procedures

Of the 188 patients admitted to the unit over an 8-month period, 67 met none of the exclusionary criteria and were asked to participate. Of those approached, 46 (69%) gave their informed consent. Two of the 46 did not meet criteria for any personality disorder on the MCMI-II,²⁵ our diagnostic screen, and were excluded from the study. Five of the 44 did not complete the research; 2 additional subjects completed the study but were excluded from data analyses, 1 because of incomplete data and 1 because of receiving ECT. Thirty-one of the remaining 37 subjects attended at least four group sessions, and these 31 subjects were included in the data analysis. Although 2 subjects did not have valid MCMI-II protocols, 1 due to nondisclosure and 1 due to extreme self-depreciation, both were included in the study because both were diagnosed with personality disorders by their inpatient psychiatrists.

Patients who met criteria for personality disorder were randomly assigned to the Creative Coping skills training group or to the Wellness and Lifestyles discussion control group by a paired randomization procedure. Within several days after admission, and prior to attending their first group session, subjects completed a battery of questionnaires and in-

terviews. They then attended the group every weekday until just before their discharge.

The Creative Coping group was developed by nursing staff and senior clinicians on the unit^{7,26} by adapting Linehan's DBT for use on a short-term inpatient unit. The group is psychoeducational and is led or co-led by nurses experienced in leading groups for inpatients with personality disorders. The group follows a 10-session format that is repeated if the patient is hospitalized for more than 10 weekdays. The group meets for 45 minutes every weekday, and patients are expected to complete written homework assignments between sessions. The 10 sessions comprise 5 lessons on emotion regulation, 4 on interpersonal effectiveness, and 1 on distress tolerance.

The Wellness and Lifestyles group was developed for the purposes of the research by the one of the authors (T.S.) and one of the nurses on the unit, who became the principal group leader. The W&L group was designed to discuss issues of interest to patients and relevant to their lives, but not in a psychotherapeutic manner. Introspection and increased self-understanding were explicitly not to be goals of the group. There were five session topics: recreation, health and fitness, families, hobbies, and current events. The control group was not as highly structured as the CC group. The group leader would introduce the day's topic and then tailor the discussion to the particular interests of the group members. The W&L group met for 45 minutes each weekday at the same time as the CC group.

Measures

Subjects completed questionnaires and interviews shortly after admission and just before discharge. Patient measures fell into the following categories: initial diagnostic/screening measure; other initial measures; change measures; and discharge measures. The initial diagnostic/screening measure was used to determine whether subjects met criteria for one or more personality disorders; it was also used to determine whether subjects in the experi-

mental and control groups were diagnostically comparable. Other initial measures were used for descriptive purposes and to assess comparability of the two groups. Change measures were administered at admission and again before discharge to assess change over the course of hospitalization and to assess any between-group differences in pretreatment-to-post-treatment change. Finally, discharge measures were administered to determine whether and how the group interventions were beneficial to subjects. Information about the patient's behavior on the unit was gathered by a review of each subject's inpatient chart. The measures are as follows:

The MCMI-II²⁵ was used to screen for personality disorder diagnoses, which were given when a scale score exceeded 70. Data on the original MCMI demonstrated that personality scale scores are highly correlated with DSM-III Axis II diagnoses.²⁷

Other measures given to determine the

comparability of patients in the two groups were as follows:

The Treatment History Interview²² (THI), a structured interview that obtained a thorough psychiatric treatment history for a target period. For this study, information was collected on current outpatient therapy and current use of psychotropic medications.

The Parasuicide History Interview²² (PHI), a semistructured interview used to assess the patient's lifetime history of parasuicide episodes. Each parasuicide is reported in detail by the subject and then rated for medical severity by medical personnel. Linehan et al.²² report that reliabilities ranged from 76% agreement on number of parasuicide acts between PHI scores and therapist notes to $r = 0.94$ between PHI and physician/nurse ratings of medical lethality.

The Social Adjustment Scale Self-Report²⁸ (SAS-SR) was used to assess overall social functioning.

TABLE 1. Demographic characteristics of entire sample and borderline personality disorder (BPD) subsample

Characteristic	Entire Sample ($n = 31$)		BPD Subsample ($n = 13$)	
	<i>n</i>	%	<i>n</i>	%
Female gender	21	67.7	9	69.2
Race				
White	27	87.1	13	100.0
African American	2	6.5	0	
Hispanic	1	3.2	0	
Asian	1	3.2	0	
Religion				
Protestant	12	38.7	5	38.5
Catholic	5	16.1	3	23.1
Jewish	1	3.2	1	7.7
Other	13	41.9	4	30.8
Education				
Partial high school	2	6.5	1	7.7
High school graduate	4	12.9	3	23.1
Partial college or specialized training	19	61.3	8	61.5
College graduate	2	6.5	1	7.7
Graduate degree or training	4	12.9	0	
Marital status				
Never married	15	48.4	7	53.8
First marriage	6	19.4	1	7.7
Remarried	2	6.5	1	7.7
Separated	2	6.5	2	15.4
Divorced	3	9.7	0	
Other	3	9.7	2	15.4

Demographic information was collected, and each subject's socioeconomic status was assessed according to Hollingshead's Four Factor Index of Socioeconomic Status.²⁴

Change measures administered after admission and again just before discharge were the Beck Depression Inventory²⁹ (BDI); the Hopelessness Scale³⁰ (HS); the Adult Suicidal Ideation Questionnaire³¹ (ASIQ); the State-Trait Anger Expression Inventory;³² the Internal-External Locus of Control Scale³³; and the Creative Coping Questionnaire³⁴ (CCQ).

The CCQ, developed for the present study, is a 32-item questionnaire assessing subjects' feelings and beliefs about issues directly addressed in DBT and the CC group (emotional control, interpersonal effectiveness, and distress tolerance). Items are rated on a 7-point Likert-type scale. The questionnaire reflected topics included in the manual developed and used by the nurses who lead the CC group. Items were found to have face validity by the group leaders, and the wording is designed so that items are not obviously "correct" or "incorrect" (so as not to pull for "correct" responses to please the researchers).

A pilot study of the CCQ was conducted on normal volunteers who were comparable to the patients in terms of age and education level.³⁴ Volunteers completed the CCQ at two time points separated by an average of 16 days, which was thought to be comparable to the average length of hospitalization for the study patients. On the basis of the pilot study, one item was excluded owing to large variability in pre-post change. The remaining items were summed to obtain the total score used in the present study.

Two measures developed for this study were administered to subjects just prior to discharge:

The Discharge Questionnaire³⁴ includes eight questions about the group rated on a 5-point, Likert-type scale. (Questions included "How helpful did you find the [CC or W&L] group overall?" "How often did the topics discussed in group relate to your own personal concerns?" and "Do you believe that things

you learned in the group will help you to better handle difficult or painful situations you may encounter in your life?"). In the Discharge Interview,³⁴ respondents were asked similar questions in an open-ended format.

Data on acting-out behaviors on the unit were gathered by a daily review of each patient's chart. Acting-out behaviors were defined as anything the patient did that was physically self-injurious or harmful to another person, contained a verbal threat of self-injury or violence, or demonstrated an attempt to undermine his or her treatment. They included 1) threats of self-harm or suicide; 2) not being able to take responsibility for one's own safety, thus requiring a check every 15 minutes by nurses; 3) signing a petition to leave the hospital in 3 days (which is every voluntary patient's right) against the advice of the inpatient treatment team; 4) refusing food for 1 day or more; 5) attempting to leave the locked unit without permission (AWOL attempt); 6) hitting objects; and 7) self-mutilative behaviors such as wrist-cutting or burning oneself with a cigarette.

RESULTS

There were 16 subjects in the Creative Coping group and 15 in the Wellness and Lifestyles control group. The groups did not differ on any demographic variables or in personality disorder diagnoses on the MCMI-II.²⁵ As mentioned above, 2 of the 31 subjects did not receive MCMI-II diagnoses owing to invalid reports. Of the remaining 29, most received multiple diagnoses, particularly combinations of DSM-III-R² clusters A (odd) and C (anxious) or clusters B (dramatic) and C. The most prominent diagnosis for each subject—that for which he or she received the highest score—was usually a cluster C diagnosis (19 subjects). There were no between-group differences in the number of subjects with an MCMI-II diagnosis of BPD; 13 of the 29 subjects received the diagnosis (CC group: 8 of 16; W&L group: 5 of 11). Chi-square analysis showed that this was not a statistically sig-

nificant difference. Two W&L subjects did not receive MCMI-II diagnoses owing to invalid protocols.

No significant between-group differences were found at admission (Time 1) on measures of social functioning (SAS-SR), parasuicide history (PHI), and treatment history (THI), including use of psychotropic medications at admission. The following data are therefore reported for the whole sample. The mean number of lifetime parasuicidal episodes ($\pm$ SD) was 2.45 ± 2.93 . Most subjects (15/31) were not in any therapy at admission. Fifteen were not taking psychotropic medications. Regarding overall social functioning, subjects scored an average of 2.68 ± 0.49 on a scale of 1 to 5, with 5 indicating poor social adjustment.

Measures completed at Time 1 were again completed at Time 2 (discharge). On most measures, there were no between-group differences at Time 1, but CC subjects reported more severe symptoms on the BDI ($t = 2.37$, $df = 29$, $P < 0.05$). The BDI was therefore used as a covariate in analyses of change scores.

As detailed in Table 2, there were no between-group differences in the average length of hospitalization (CC: 13.3 ± 3.6 days; W&L: 11.9 ± 4.3) or the average number of group sessions attended by subjects (CC: 6.3 ± 2.0 ; W&L: 5.5 ± 1.6).

The average size of the groups was larger for the CC group (3.1, range 1–5, mode = 3) than the W&L group (1.3, range 1–3, mode = 1). The discrepancy arose because patients not participating in the research usually attended the CC group. This occurred because 1) every patient who participated in the CC group during a previous hospitalization within the past year (and was therefore excluded from the research) participated in the group again; and 2) patients who declined to join the study, usually because they did not want to fill out questionnaires, were still offered participation in the group. These patients were directed to the CC group by their treatment team because the team believed the CC group would be

more therapeutic than the control group. The original research plan called for offering patients who did not consent to the research the option of attending either group in order to even out group membership. In reality, however, it was impossible to put this plan into practice and also maintain harmony between clinical and research staff.

As predicted, all subjects improved significantly over the course of hospitalization, according to one-tailed t -tests, on measures of depression, hopelessness, and suicidal ideation (BDI: $t = 6.76$, $df = 30$, $P < 0.0001$; HS: $t = 3.73$, $df = 29$, $P < 0.001$; ASIQ: $t = 2.95$, $df = 30$, $P < 0.01$). As predicted, there were no between-group differences on these change measures, a result similar to the findings of Linehan et al.²² Analyses of covariance (ANCOVAs) with the Time 1 BDI as covariate revealed no significant between-group differences (see Table 2).

We predicted that the CC group would show a greater improvement in anger, locus of control, increased knowledge of coping skills, and acting out on the unit than the W&L group. This prediction was not supported. ANCOVAs failed to reveal between-group differences on any scales of the State-Trait Anger Expression Inventory or on knowledge of coping skills (CCQ). Regarding locus of control, the ANCOVA revealed a trend opposite to what was predicted: W&L subjects became more internal in their orientation than CC subjects, who became only somewhat more internal ($F = 3.11$, $df = 1, 28$, $P = 0.09$). Chi-square analysis of acting out on the unit also revealed the opposite of what was predicted: significantly more CC subjects engaged in some form of acting out during their hospitalization ($\chi^2 = 4.13$, $df = 1$, $P < 0.05$; see Table 2).

A possible explanation for the lack of improvement among CC group members is that CC therapy may not be appropriate treatment for all personality disorders patients but only for those with BPD. (Linehan's DBT has been studied only among BPD patients.) Therefore, analyses identical to those de-

scribed above were repeated with the subsample of 13 subjects who received a score greater than 70 on the borderline scale of the MCMI-II (8 in CC vs. 5 in W&L). There were no significant differences in demographic characteristics between the BPD subjects and the sample as a whole or between the CC and W&L group subjects in the BPD subsample.

Among the BPD subsample, the CC and W&L groups did not differ on admission measures of social functioning, parasuicide history, or treatment history. Other Time 1 measures were also assessed. CC subjects reported greater pathology than W&L subjects at Time 1 on the BDI ($t = 2.38$, $df = 11$, $P = 0.04$) and the ASIQ ($t = 2.57$, $df = 11$, $P = 0.03$). Two covariates were therefore used in subsequent analyses of change: BDI score at Time 1 and a composite sum score of the BDI and the ASIQ. The ASIQ was not used as a separate covariate because it was highly correlated with the composite score; results using the ASIQ total score as a covariate were vir-

tually identical to results using the composite covariate.

There were no significant differences between the CC and W&L groups in the BPD subsample on the length of hospitalization (12.2 ± 4.0 days) or the average number of group sessions attended (5.5 ± 1.1).

Similar to the whole sample, BPD subjects reported significant improvement on all change measures on which improvement was predicted: depression, hopelessness, and suicidal ideation. ANCOVAs to examine between-group differences in change scores (with BDI and BDI plus ASIQ composite as covariates) revealed only the change in locus of control as significant: W&L subjects became significantly more internal in orientation than CC subjects, who became only somewhat more internal. This finding was significant when the composite covariate was entered ($F = 12.05$, $df = 1, 10$, $P = 0.006$), but it was reduced to a trend with the BDI covariate ($F = 4.29$, $df = 1, 9$, $P = 0.07$). This finding is

TABLE 2. Group differences on admission and discharge data and change scores

Measure	CC Group	W&L Group
Sample size (n)	16	15
BPD:non-BPD ^a	8:8	5:6
Days hospitalized	13.3 ± 3.6	11.9 ± 4.3
Number of sessions	6.3 ± 2.0	5.5 ± 1.6
Group size	3.1 (mode = 3)	1.3 (mode = 1)
BDI score at admission ^b	36.1 ± 2.0	$29.9 \pm 2.3^{**}$
Subjects acting out (n)	10 (63%)	3 (20%) ^{**}
Change score		
Depression (BDI) ^c	-15.5 ± 3.5	-15.3 ± 3.0
Hopelessness (HS) ^c	-5.5 ± 2.0	-5.4 ± 2.2
Suicidal ideation (ASIQ) ^c	-27.0 ± 12.5	-21.0 ± 10.7
Coping skills (CCQ) ^c	15.2 ± 7.1	24.3 ± 8.0
Anger expression (STAXI global) ^c	-1.6 ± 1.6	-4.3 ± 2.2
Locus of control ^c	-0.3 ± 0.7	$-1.1 \pm 1.0^{*}$

•• Note: Values are means $\pm$ SE unless otherwise noted. CC = Creative Coping; W&L = Wellness and Lifestyles; BPD = borderline personality disorder; MCMI-II = Millon Clinical Multiaxial Inventory, Version II; BDI = Beck Depression Inventory; HS = Hopelessness Scale; ASIQ = Adult Suicidal Ideation Questionnaire; CCQ = Creative Coping Questionnaire; STAXI = State-Trait Anger Expression Inventory.

^aTwo W&L patients did not receive scores on the MCMI-II.

^bTwo-tailed t -test.

^cAnalysis of covariance.

* $P < 0.1$; ** $P < 0.05$.

similar to the finding in the whole sample. Therefore, between-group differences within the BPD subsample were no different from between-group differences in the whole sample, suggesting that inpatients with BPD do not appear to respond differently to the group treatment than inpatients with personality disorders in general.

Exploratory analyses of the Discharge Questionnaire were conducted among the entire sample to assess whether subjects experienced the groups as helpful and, if so, in what ways. ANCOVAs revealed no between-group differences on almost all items, such as how beneficial, enjoyable, and relevant patients found the group. The only significant between-group difference was on the following: "Do you believe that things you learned in the [CC or W&L] group will help you to better handle difficult or painful situations you may encounter in your life?" CC group subjects agreed significantly more strongly with this item than W&L subjects ($F = 4.48$, $df = 1, 28$, $P = 0.04$).

DISCUSSION

The results of this study must be interpreted with caution, given that many variables were examined and the sample size was limited.

Findings Relevant to Initial Hypotheses

As predicted, subjects in both groups demonstrated significant improvement in depression, hopelessness, and suicidal ideation, corroborating as well as replicating in an inpatient sample the findings of Linehan et al.²² Improvement in most areas for patients in this study suggests that substantial gains are possible even in brief hospitalizations. Patients beginning an inpatient stay usually feel themselves to be in the worst possible condition; therefore, it makes sense that some improvement would occur because there is nowhere to go but up. However, the consistency of positive change is still noteworthy.

In other areas, where between-group dif-

ferences were predicted, the data do not support the predictions. CC subjects did not demonstrate greater decreases in anger than W&L subjects; both groups showed improvement on most of the anger subscales without between-group distinctions. There were no between-group differences on the questionnaire measure of coping skills (the CCQ). This finding was surprising because the CCQ items were drawn directly from CC group lesson topics. CCQ items had shown stability over time as demonstrated in pilot (nonpatient) volunteers during development of the questionnaire. Among pilot subjects, scores on the CCQ were highly stable over an average 16-day interval.³⁴ Among the inpatient sample, significant improvement was found between the beginning and end of hospitalization ($t = 3.70$, $df = 30$, $P < 0.0005$); however, the predicted between-group difference was not apparent even though CCQ items query specifically for lessons taught in the CC group.

Turning to locus of control, it was predicted that CC subjects would become significantly more internal in orientation toward reinforcement than W&L subjects. However, a trend in the opposite direction was found. Although both groups became more internal, the W&L subjects became more internal than the CC subjects. Perhaps talking about physical fitness and hobbies helped the W&L subjects feel that they could take more control over some aspects of their lives, leading to a more internal orientation to reinforcement.

It is difficult to explain why this was not equally so for the CC subjects. The CC group teaches patients to cope more effectively with difficult feelings, and the concept that people can change behaviors and cope more effectively would appear to support a more internal locus of control. However, another aim of the CC group is to explain that sometimes bad things simply happen and that the patient cannot always make things happen differently. For example, a loved one may disappoint, and attempts to coerce or manipulate the other person may often do more harm than good. CC patients are taught to acknowledge the

limitations of their control, to accept reality, and to tolerate distress, whereas W&L patients may have concentrated on nonconflictual areas that are easier to control. CC group teachings may reveal that reinforcements are both internally and externally determined.

Predictions relating to acting-out behavior on the unit were not supported. Rather, the data revealed the opposite of what was predicted: patients in the CC group acted out significantly more than patients in the W&L group. Exploring the data more qualitatively on a case-by-case basis revealed interesting issues. First, of the 6 patients who committed self-mutilative acts on the unit, such as burning or wrist-cutting, 2 (both in the CC group) reported no prior history of such behavior. A possible explanation for this finding may be a contagion effect. Perhaps discussing parasuicidal behavior in the CC group and listening to other patients describe their self-mutilative behaviors or fantasies may encourage other emotionally vulnerable patients to try such methods to relieve their own dysphoric feelings.³⁵ Another possible explanation is that patients in the CC group learn that parasuicidal behavior is a sort of "currency" of the unit; because parasuicidal behavior is given so much overt attention in the group, it could be something that will receive a great deal of attention on the unit as well.

Four of the 10 CC patients who acted out on the unit showed an increase in this behavior over the course of their hospitalizations. In contrast, none of the 3 acting-out W&L patients showed an increase. Additionally, 3 CC subjects threatened self-harm or suicide close to the time of their scheduled discharge, whereas no W&L patients did so. Again, these behaviors in directions opposite to our predictions may be explained by the idea that parasuicidal behavior may be viewed as a currency of the unit and if suicide threats are made, perhaps discharge will be postponed. Alternatively, patients who threaten suicide or self-harm may be complying with the CC group leaders' instructions to verbalize feelings rather than to keep them inside and eventually

act on them. It may be that the W&L patients were feeling similar to the CC patients as discharge approached but were simply not publicizing their feelings.

Perhaps, then, CC group may heighten the issue of parasuicidal behavior for some patients through its explicit focus. Although it is not possible to draw definite conclusions based on such a small number of subjects, these findings raise questions about the effects of focusing on the issue of parasuicidal behavior during a short-term hospitalization when there may be little time to resolve the issue after it is opened.

Findings From Subjects With Borderline Personality Disorder

Because the predictions of between-group differences were not supported, we conducted a secondary set of analyses with a subsample of the subjects with the diagnosis of BPD ($n = 13$). Findings were essentially the same as for the sample as a whole. Although the small number of subjects dictates caution in interpreting these findings, it appears that subjects with BPD were not affected differently by the CC group than were subjects with personality disorders in general.

Findings Relevant to Exploratory Questions

Subjects were asked to rate aspects of the group experience on the Discharge Questionnaire. There was little between-group difference on most items such as how much they enjoyed or benefited from the group or how relevant group issues were to their personal concerns. Subjects appeared to value both groups, but for different reasons. According to the Discharge Interview, many CC subjects valued the experience of universality¹⁰ afforded them by the group. In the words of one female patient in the CC group:

It really helps make me feel better about myself . . . talking to other people who had problems and maybe coped with them the same way that I did. . . . It vali-

dates your own feelings when you see that there are other people with these same feelings who are trying to deal with them too. . . . They come up with ideas that fit the situation that maybe you hadn't thought of, and it helps everybody. Especially being in group with someone else who was a cutter. That's one of those behaviors you don't run into a lot, except in a hospital.

Among W&L subjects, discharge interviews suggested the importance of distraction. Many W&L subjects mentioned enjoying taking walks off the unit with the group leader and taking their minds off their problems. One subject said she liked the W&L group because "it was the lightest part of my day." Another woman said:

I think it was a good distraction from what was going on. . . . It was good to do something that wasn't dredging up a lot of emotional feelings. . . . We looked at the art projects and the hobbies. . . . If anybody was upset before they went into the group then they felt better when they came out.

Another W&L subject said:

It was an interesting opportunity to sort of step out of just being a patient, just being a sick person, and sort of return to more normal, more usual sorts of pursuits. . . . It made me realize that maybe there were parts of me that were still functioning that I hadn't . . . looked at in a while.

The only Likert-type item on the Discharge Questionnaire on which between-group differences were significant was the question about whether the things learned in group would help them better handle future difficult or painful situations. CC group subjects agreed significantly more strongly with this item. CC group was seen as particularly useful in helping patients manage their anger. This was mentioned by several patients as likely to be of great importance in their outside

lives. One male patient said, "Instead of keeping anger bottled up, there are different ways to express your anger. . . . I used to express it, probably still do . . . physically. I think for me verbally would be better."

Learning the lessons taught by the CC group is not easy, according to the subjects, but, at least for some, working hard to learn the lessons they will later apply to their outside lives is worth the effort. As one male patient said:

I guess a helpful thing is that you start to deal with the expectation that you are going to have to continue the work, that this is not the end of it. . . . This is not going to solve your problem, but this is making you think about it. . . . It says you have to go home and you have to do this. You have to integrate some of this stuff and you can't be lazy.

It is not that the work of the CC group is pleasurable. In fact, it can be quite painful. As one CC group member said:

I disliked the same thing about the group that I dislike about an intense therapy session. . . . Dealing with this stuff isn't always pleasant, and the group deals with things on that kind of level. So it's not going to feel good. It helps but it doesn't feel good.

SUMMARY AND CONCLUSIONS

The present study demonstrated that short-term psychiatric hospitalizations were highly beneficial for a sample of patients with personality disorders. However, those patients who participated in a cognitive-behavioral therapy group, the CC group, did not benefit significantly more from the hospitalization than patients randomly assigned to a control condition. In fact, patients in the CC group acted out on the unit significantly more than patients in the W&L group. However, because of the small number of subjects who acted out

at all ($n = 13$) caution is indicated in interpreting this finding.

There are at least two possible explanations for the paucity of this study's findings. First, the average length of hospitalization (12.6 days for both groups combined) may be too short to demonstrate any differential treatment effects, especially among patients with severe character pathology. Patients attended an average of only 6 group sessions, and perhaps nonspecific or common factors among the two groups, or simply the multiple forms of interaction on the unit, were more contributory to any pre-post change than was the content of group sessions.

Second, the W&L group seems to have helped patients in ways not predicted and in ways that seem (according to the patients' discharge interviews) different from what was reported helpful by the CC patients. This supports the findings of Coché and Douglas,¹⁸ who demonstrated in a methodologically similar study that a placebo playreading group was as helpful as a cognitive problem-solving therapy group in decreasing depression and overall psychopathology during a brief hospitalization. The authors conclude that "There may be a considerable curative value in a common enjoyable experience, which has not received much attention in the psychotherapy research literature so far" (p. 825). This comment may apply to our W&L group. Discharge interviews with W&L subjects revealed that several of these patients enjoyed feeling distracted from their problems by the group, allowing them to feel less like patients with mental illnesses and more like normal people with a range of interests.

A significant difference did emerge in the patients' subjective impressions of the groups. The CC subjects believed they would be better able to handle difficult or painful situations in their lives outside the hospital. However, it is also possible that these patients repeated what the group leaders wanted them to learn, conveying the "correct" attitude. In fact, the finding that CC subjects showed less of an increase in internal locus of control than W&L

subjects, although only a statistical trend, suggests that CC subjects may not have truly learned this lesson.

Several methodological limitations exist in the present study. The first pertains to the personality disorder diagnoses. According to the MCMI-II,²⁵ the majority of subjects (19/31), had most prominent personality disorder diagnoses in cluster C. When the MCMI-II diagnoses were compared to the inpatient psychiatrists' (resident and attending physician's) discharge diagnoses, there was little agreement. These diagnostic discrepancies are similar to those described by Piersma,³⁶ who found that clinicians diagnosed Axis II personality disorders in inpatients much less frequently than did the original version of the MCMI.

While it is possible that personality disorders were underdiagnosed by the psychiatrists, it is also possible that they were overdiagnosed by the MCMI-II. This diagnostic measure, normed on outpatients, may not be as sensitive to diagnostic distinctions in more acutely disturbed inpatients. Perhaps patients' anxious or depressed mood upon admission strongly influenced their MCMI-II personality scores.³⁷ Piersma³⁶ also found low correspondence between admission and discharge diagnoses on the personality scales of the MCMI.

The difficulty of accurately diagnosing patients immediately after admission raises the issue of research screening criteria. Behavioral criteria might have been more appropriate inclusionary criteria for this study than MCMI-II personality disorder diagnostic criteria. Linehan's DBT was originally designed for parasuicidal patients; only later did Linehan realize that essentially she was dealing with BPD patients.¹⁹ Employing behavioral screening criteria (for parasuicidality) for this study might have ensured that the patients in the group were those individuals for whom the treatment was designed.

The between-group difference in the modal number of members attending each session was another confound (3 for CC group, 1

for W&L group). The W&L group was often a one-on-one interaction rather than a discussion group. In contrast, the interaction in the CC group was more didactic, resembling a classroom more than a conversation. The CC group focus was not on group interaction but on encouraging members to reflect and respond to questions posed by the group leaders, similar to the interaction between teacher and student. Linehan,¹⁹ however, believes that small group size is not problematic, that a group needs only 2 patients, and that skills training may even be given to patients individually.

Another methodological confound was the unit staff's preconceptions about the groups. Many of the unit's staff members believed the Creative Coping group was an essential component of effective treatment for patients with personality disorders, especially BPD. The CC group had been in existence for a couple of years prior to beginning the research, and many staff members felt invested in the group. The group provided staff members with greater confidence in managing difficult patients and an increased sense of optimism that effective treatment was possible.⁷ The staff's posture in and of itself was probably of therapeutic value to the patients; staff members may have communicated their optimism to the patients. However, the staff's feelings and beliefs may have also had repercussions for patients assigned to the control W&L condition. It was not uncommon for nurses to complain to the researchers when patients were assigned to the control condition, believing these patients would not receive optimal care. This message may have been communicated to some W&L subjects, although inadvertently or subtly. It is therefore impressive that the W&L subjects demonstrated significant gains during hospitalization even though some staff members felt these patients were entering treatment with the cards stacked against them.

The study group is too small to draw definite conclusions, and therefore this should be considered a preliminary report. With a

larger sample, perhaps some between-group differences would have emerged. With our cell sizes, only large effect sizes could be detected. However, it may also be desirable to opt for large effect sizes in order to demonstrate that the treatment makes a clear difference. Instituting an inpatient DBT program requires considerable expenditure of financial and human resources, and the advisability of incurring such an expense must be considered.

Several recommendations emerge for future research. Groups with more even membership should be compared. An additional comparison group could be added, such as an insight-oriented group, to address the question of whether any therapy group is more or less effective than any other for personality-disorder patients during a short-term hospitalization.

Ideally, research should take place on an inpatient unit where staff members are not more highly invested in one treatment than in another. In the present study, it was not possible to isolate the effects of the CC group from other aspects of the milieu. Because the CC group had been in existence for 2 years, it had already influenced the milieu. The present research was not able to address the important question of how much of the variance in patient improvement was attributable to the groups themselves as opposed to more general effects of the milieu. Undoubtedly, numerous aspects of the milieu were highly influential: other groups that patients attended; patients' individual meetings with staff; staff enthusiasm about the CC group; and staff's feeling that they were empowered to treat difficult patients in a proactive rather than a reactive manner. A research design similar to that of Barley et al.¹⁴ might have been more useful. Barley and his colleagues compared two separate units before, during, and after the institution of a new DBT program on one of the units.

Future research must also take into account findings from postdischarge data. These data should reveal whether the gains the subjects felt they made during brief hospitalization actually carried over to their outside lives.

Follow-up data may reveal additional benefits, or perhaps negative sequelae, that were not apparent upon discharge.

Despite the methodological limitations of the present study and the need for follow-up data, important issues were addressed. The study demonstrated that short-term hospitalization may be highly beneficial for patients with personality disorders; however, the additional benefit of a cognitive-behavioral therapy group for these patients is less clear. It does not seem to lead to greater symptomatic improvement than a discussion control group. In fact, one could speculate that focusing on parasuicidality within a group setting during a short-term hospitalization may do more harm than good in terms of encouraging acting out on the unit. The Relationship Management Model³⁸ would predict these results. According to this model, if the clinician allows parasuicidality to become "legitimate currency" by focusing on suicidal threats and behaviors, the patient will then use this currency in interpersonal negotiations with the clinician. However, the acting-out results in the present study must not be overinterpreted because they are based on fewer than half of the subjects ($n = 13$).

Where the CC group seems to be useful is in helping patients feel that they are not alone in their suffering and in giving them a feeling that they have learned new skills that they may apply in their lives outside the hospital. However, follow-up data are necessary to support this finding, and behavioral data gathered on the unit suggest that the finding should be viewed with caution. It may be that cognitive-behavioral skills-training groups

such as the CC group are best suited to longer term hospital units rather than to short-term units. Barley et al.¹⁴ described such a unit where a group was found to be successful in reducing on-unit parasuicidality during an average 3-month stay. However, shorter term hospitalizations, such as the average 13 days in the present study, are more representative of the national trend.¹¹

As psychiatric hospitalizations decrease in length,¹¹ it becomes increasingly important to develop treatments suitable to brief hospitalizations, especially for patients who are difficult to treat. If the Creative Coping group is eventually shown to be beneficial in follow-up data, this would lend support to the recommendation of Barley et al.¹⁴ that inpatient units adopt such programs. However, if the CC group is not shown to be beneficial on follow-up, then limited resources may be better used to refine or modify existing programs to increase the likelihood of providing the best possible inpatient care.

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