# Group Coping Skills Instruction and Supportive Group Therapy for Cancer Patients: A Comparison of Strategies

# Christy F. Telch and Michael J. Telch

Laboratory for the Study of Behavioral Medicine, Stanford University

The present study compared the relative efficacy of comprehensive group coping skills training and supportive group therapy for enhancing cancer patients' adjustment to their disease. Forty-one cancer patients exhibiting a marked degree of psychosocial distress were randomized to one of three conditions: (a) group coping skills instruction, (b) support group therapy, and (c) no-treatment control. Support group sessions were nondirective and emphasized the mutual sharing of feelings and concerns. Coping skills training included instruction in: (a) relaxation and stress management, (b) assertive communication, (c) cognitive restructuring and problem solving, (d) feelings management, and (e) pleasant activity planning. Results demonstrated a consistent superiority of the coping skills intervention over supportive group therapy and the no-treatment control. Patients receiving supportive group therapy exhibited little improvement, and untreated patients evidenced a significant deterioration in psychological adjustment. These results support providing psychologically distressed cancer patients with multifaceted coping skills training.

A significant proportion of cancer patients experience difficulty adjusting to their illness, and in many patients these problems are enduring (Maguire et al., 1978; Meyerowitz, 1983; Morris, Greer, & White, 1977; Schonfield, 1972). Estimates of the prevalence of significant psychological disruption such as depression, anxiety, anger, feelings of worthlessness, and hopelessness have ranged from between 23 and 66% of cancer patient populations studied (Meyerowitz, 1980; Peck & Boland, 1977; Plumb & Holland, 1977). Additionally, patients frequently report adverse reactions to chemotherapy treatments (Araoz, 1983; Burish & Lyles, 1983; Redd & Hendler, 1983); family distress (Burish & Lyles, 1983; Heinrich, Schag, & Ganz, 1983; Lichtman et al., 1984); sexual problems (Andersen & Hacker, 1983; Andersen & Jochimsen, 1985; Jamison, Wellisch, & Pasnau, 1978); and disruption of their day-to-day physical, social, vocational, and cognitive functioning (Heinrich, Schag, & Ganz, 1983). These studies suggest that the diagnosis and treatment of cancer can have pervasive negative psychosocial effects on the lives of many patients.

Although much is now known about the psychosocial effects of cancer, only a handful of experiments have been directed at systematically evaluating psychological interventions for cancer patients. Supportive group therapy has been the most widely used and the most widely studied (Telch & Telch, 1985). Studies by Ferlic, Goldman, and Kennedy (1979) and Vachon, Lyall, Rogers, Cochrane, and Freeman (1981) found supportive group counseling to be beneficial in reducing cancer patients' emotional distress. Spiegel, Bloom, and Yalom, (1981) compared supportive group therapy and a no-treatment control with 58 metastatic breast cancer patients. No significant betweengroups differences were found at either the 4- or 8-month assessment; however, at the 12-month assessment patients receiving supportive group therapy were less tense, less depressed, less fatigued, and had fewer phobias than untreated patients. In a study of Hodgkin's patients, Jacobs, Ross, Walker, and Stockdale (1983) reported no significant differences in psychological functioning at an 8-week posttest between those patients receiving support group therapy and a no-treatment control group.

Recent research suggests that psychological interventions involving structured training in the use of specific coping skills may help patients adjust to the psychosocial disruption of cancer. Progressive muscle relaxation plus guided imagery (Burish & Lyles, 1981; Lyles, Burish, Krozley, & Oldham, 1982), hypnosis plus guided imagery (Redd, Andresen, & Minagawa, 1982), and systematic desensitization (Morrow & Morrell, 1982) have been effective in reducing the nausea, vomiting, anxiety, and depression that many patients experience before, during, and after chemotherapy injections. Self-instruction plus problem-solving training has been shown to reduce patients' emotional distress compared with a no-treatment control group (Weisman, Worden, & Sobel, 1980). An intervention program providing both educational (e.g., relaxation training) and individual supportive counseling services ameliorated some patient problems and helped diminish negative affect (Gordon et al., 1980).

The present study examined the relative efficacy of group coping skills instruction, supportive group therapy, and a notreatment control in promoting psychological adjustment among clinically distressed cancer patients. It was hypothesized that patients receiving group coping skills instruction would evidence significantly less psychological distress and greater adjustment than patients assigned to supportive group therapy or

This research was supported by the California division of the American Cancer Society, Contract No. 550-5 E. The authors thank Susan Weisberg, Isabel Walker, Frank Stockdale, Phoebe Elsworth, Carl Thoresen, C. Barr Taylor, and Joel Killen for their assistance.

Correspondence concerning this article should be addressed to Michael J. Telch, who is now at the Department of Psychology, University of Texas, Austin, Texas 78713.

no-treatment control. It was expected that patients receiving supportive group counseling would show less distress than patients receiving no psychological treatment.

## Method

#### Patients

Forty-one cancer patients (27 women, 14 men) from 19- to 64-years old (M = 41.3) receiving outpatient care at Stanford University Medical Center participated in the study. Patients represented a variety of cancer types, disease stages, treatment regimens, and times since the cancer was initially diagnosed. The specific types of cancer included 15 breast, 12 Hodgkin's, 6 lymphoma, 2 lung, 2 ovarian, 1 colon, 1 melanoma, 1 tongue, and 1 malignant schwanoma. Patient entry criteria included (a) age of 18-65 years, (b) Karnofsky Performance Status score<sup>1</sup> of 70 or above, and (c) clear evidence of psychosocial distress as measured by a structured interview score greater than 36.<sup>2</sup>

## Design and Procedures

Potential study participants were recruited during routine clinic visits and invited to a structured screening interview developed for the study. Patients meeting the entry criteria were assigned in groups of 5 and then each group was randomized to one of three experimental conditions: (a) group coping skills instruction, (b) support group therapy, and (c) no-treatment control. Three separate patient groups were recruited within each experimental condition. There were 14 patients in the no-treatment and support group conditions and 13 in the coping skills condition. The patient groups were comparable on demographic and medical factors.

#### Assessments

All assessments were conducted at pretest and at the 6-week posttest. Structured clinical interview ratings. The structured interview consisted of 21 questions. Responses to each question were rated on a 5point Likert scale according to the patient's level of distress. The questions targeted four general problem areas: (a) medical concerns; (b) family, social, and sexual relationships; (c) problems in daily living; and (d) cognitive, affective, and behavioral adjustment difficulties. The 21-item ratings were summed to derive an index of overall psychosocial adjustment. A higher score indicates greater distress. Screening interviews lasted about 30 min and were conducted and scored by the first author and a licensed clinical social worker. In addition, each interview was audiotaped and evaluated by an independent rater who was blind to the patients' group assignments. Interrater reliability for the interview was .86 preprogram and .93 postprogram. Concurrent validity of the interview was established by demonstrating significant correlations between the interview total score with other established indices of psychological functioning (i.e., Profile of Mood States [POMS], r = .69; Cancer Inventory of Problem Situation [CIPS]: severity, r = .43; intensity, r = .42).

POMS. The POMS (McNair, Lorr, & Droppleman, 1971) is a standard instrument for assessing mood states and has been reported to be a sensitive indicator of cancer patients' responses to psychological intervention (Spiegel et al., 1981; Weisman et al., 1980). It is a 65-item adjective checklist containing six mood-related subscales: Tension-Anxiety, Depression-Dejection, Anger-Hostility, Vigor, Fatigue, and Confusion-Bewilderment. High internal consistency and test-retest reliability has been reported for each of the six subscales (McNair et al., 1971).

CIPS. The CIPS (Schag, Heinrich, & Ganz, 1983) contains 144 items that describe specific problems commonly confronted by cancer patients. Twenty-five problem area subscale scores and 3 total scores can

be obtained. The total scores include (a) overall problem severity, (b) total number of problems, and (c) the average problem intensity. Subjects were instructed to rate on a 5-point scale (ranging from *not at all a problem* [0] to very much a problem [4]) the degree to which each statement applied to them. Alpha coefficients for the CIPS subscales average .84 and test-retest reliabilities for each of the subscales are above .80 (Schag et al., 1983).

Perceived Self-Efficacy scale. This 38-item scale (Telch & Telch, 1982) assesses patients' beliefs concerning their ability to cope in various situations or to perform specific behaviors found to be difficult for cancer patients (e.g., asking for help from family members, discussing treatment options with the physician, feeling physically attractive). Patients were instructed to circle the number on a 0-10 scale (ranging from not at all confident [0] to absolutely confident [10]) that best represented their confidence in coping with the situation described. The scale consists of six subscales each demonstrating high internal consistency (Cronbach  $\alpha$ s ranging from .77 to .92). The subscales are (a) Coping With Medical Procedures; (b) Communication With Physicians, Friends, and Family; (c) Participation in Vocational, Social, and Physical Activities; (d) Personal Management; (e) Affective Management; and (f) Self-Satisfaction. A total score representing patients' overall efficacy strength is computed by summing patients' confidence ratings on each of the 38 items. The scale has also demonstrated high test-retest reliability (r = .95).

Treatment credibility. All intervention patients were instructed to complete a brief, 10-item anonymous form evaluating (a) feelings regarding the adequacy of the group in meeting various needs, (b) overall level of satisfaction with the group content and process, and (c) satisfaction with the group leader. These ratings were made on a 9-point scale, and were used to examine whether patients in the two intervention conditions were equally satisfied with the treatment received, and whether the group leader was perceived as equally satisfactory in both intervention conditions.

Skills home practice records. Patients in the coping skills condition rated on a 7-point scale the frequency with which they practiced the specific skills taught in the treatment sessions. The major purpose of these records was to assess whether patients were using the targeted skills in their natural environment.

## Experimental Conditions

Three separate coping skills instruction groups and three support groups were formed between November, 1983, and June, 1984. Each group met once a week for 6 consecutive weekly sessions. Sessions lasted about 90 min. All group sessions were conducted by an advanced doctoral student in counseling psychology or a licensed clinical social worker. Both therapists had a minimum of 2 years of experience in con-

<sup>&</sup>lt;sup>1</sup> The Karnofsky Performance Status Scale is an interviewer-rated instrument used to evaluate a patient's degree of impairment in physical activity and self-care. It is divided into 10-point increments ranging from 0 (*dead*) to 100 (*normal, no complaints, no evidence of disease*). The score of 70 was selected as a cutoff based on our previous experience suggesting that patients scoring below 70 would be unable to fulfill study requirements (i.e., attending group sessions). The scale has demonstrated high interrater reliability and construct validity (Schag, Heinrich, & Ganz, 1982).

<sup>&</sup>lt;sup>2</sup> Pilot data collected from 200 patients interviewed prior to the study's initiation were used to determine the entry criterion. The structured interview cutoff score of 36 achieved the highest level of correct classifications of patient status (distressed vs. nondistressed) as measured by dichotomous ratings of distress (yes or no) by the hospital so-cial work staff.

Table 1	
Intergroup and Within-Group Comparisons on Profile of Mood States (POMS)	

	_		_		_	Intergroup (t-test) comparisons at posttest <sup>a</sup>				Within-group ( <i>t</i> -test)			
	Gp 1		Gp 2		Gp 3		Gp 1 vs.	Gp 1 vs.	<u> </u>	comparisons (pre- to posttest)			
Measure	M	SD	М	SD	М	SD	Gp 1 vs. Gp 2	Gp 1 vs. Gp 3	Gp 2 vs. Gp 3	Gp 1	Gp 2	Gp 3	
Tension-anxiety													
Pretest	18.38	7.65	12.61	5.13	13.30	6.04							
Posttest	7.20	1.66	9.14	3.90	18.01	7.32	2.52	7.54***	5.31***	5.25***	3.42**	3.94**	
Depression													
Pretest	21.82	12.81	11.60	5.93	12.82	7.42							
Posttest	5.71	2.57	9.22	6.09	19.40	10.02	3.14**	7.05***	4.22***	4.58***	2.44*	5.31***	
Anger-hostility													
Pretest	13.52	11.92	7.81	5.34	7.88	3.30							
Posttest	3.89	2.94	6.42	4.52	11.72	7.32	1.90	4.51***	2.82**	3.20**	0.87	2.30*	
Vigor													
Pretest	8.90	4.86	13.92	5.27	10.58	3.28							
Posttest	17.02	6.28	14.21	6.01	9.35	5.29	3.33**	4.94***	1.40	5.12***	0.27	1.13	
Fatigue													
Pretest	15.31	7.43	10.54	4.55	10.06	7.03							
Posttest	5.92	3.02	8.90	5.53	12.35	5.85	4.03***	6.52***	2.84**	5.62***	1.82	0.41	
Confusion													
Pretest	12.32	4.62	7.60	3.54	9.23	3.31							
Posttest	5.24	2.02	7.55	3.22	11.62	4.65	2.81**	5.74***	2.82**	4.63***	0.12	3.83**	
POMS total													
Pretest	87.41	42.32	51.09	23.21	57.83	26.85							
Posttest	25.81	12.26	42.02	23.21	78.84	32.71	3.13**	7.12***	4.07***	4.86***	1.69	5.12***	

Note. Gp 1 = coping skills instruction. Gp 2 = support group therapy. Gp 3 = no-treatment control. For between-groups comparisons, df = 37. For within-group comparisons, df = 12, 13, and 13 for Gps 1–3, respectively.

<sup>a</sup> To adjust significance levels for multiple comparisons, Bonferroni adjustment may be applied by multiplying the significance level by 3 (i.e., the number of comparisons within each variable).

\* p < .05. \*\* p < .01. \*\*\* p < .001.

ducting cancer patient groups. The doctoral student led two groups in each condition while the social worker led one group per condition.

Group coping skills instruction. The group coping skills instruction emphasized teaching and rehearsal of cognitive, behavioral, and affective coping strategies. One of five different instructional modules was presented each week. The group instructor presented a general rationale and introduction to each new topic area and then described specific coping techniques relevant to each topic area. A variety of structured exercises were used to demonstrate how the various skills could be implemented in common patient situations. Behavioral strategies included (a) homework assignments, (b) goal setting, (c) self-monitoring, (d) behavioral rehearsal and role-playing, and (e) feedback and coaching. Behavioral rehearsal of specific skills was used to give each group member an opportunity to practice the coping techniques and receive feedback during the sessions. The importance of frequent home practice of these skills was emphasized at the end of each session. To facilitate home practice, patients were provided with written materials that summarized and highlighted each of the concepts and skills presented. The five coping skills module areas were (a) relaxation and stress management. (b) communication and assertion, (c) problem solving and constructive thinking, (d) feelings management, (e) pleasant activity planning.<sup>3</sup>

Support group therapy. Support group sessions were aimed at letting patients discuss feelings, concerns, and problems. The group leader served as a facilitator, pointing out common themes underlying individual problems (e.g., helplessness, sense of loss of control) and encouraging participation by all group members. The support group sessions had no specific, preplanned agenda or set of structured exercises.

No-treatment control. Patients assigned to this condition completed the structured interview and the paper-and-pencil measures at 0 and 6 weeks but received no psychological intervention. Controls were informed that they could participate in ongoing service programs after the 6-week assessment.

## Results

## Analysis of Medical Data

To test for differences in patients' medical status among the three study conditions, chi-square analyses were performed on categorical medical indices. Results revealed no significant differences between groups with regard to (a) cancer type, (b) time since the cancer was initially diagnosed, (c) metastatic spread, and (d) receipt of treatment for localized or widespread disease, or adjuvant treatment.

#### Analysis of Pretest Data

To assess the equivalency of groups on the psychological measures at pretest, one-way analyses of variance were performed. Significant between-groups differences at pretest were found on all but one subscale of the POMS, and 50% of the self-efficacy scales. Examination of the pretest group means revealed that patients in the coping skills condition reported higher mean lev-

<sup>&</sup>lt;sup>3</sup> A more detailed description of each of the five coping skill modules is available from the authors.

 Table 2

 Intergroup and Within-Group Comparisons on Perceived Self-Efficacy

							Intergroup ( <i>t</i> -test) comparisons at posttest <sup>a</sup>			Within-group (t-test) comparisons			
	Gp 1		Gp 2		Gp 3		<u> </u>			(pre- to posttest)			
Measure	М	SD	М	SD	М	SD	Gp 1 vs. Gp 2	Gp 1 vs. Gp 3	Gp 2 vs. Gp 3	Gp 1	Gp 2	Gp 3	
Coping with medical procedures													
Pretest	25.52	9.65	30.01	10.32	32.64	8.91							
Posttest	38.40	7.42	28.15	11.61	25.83	9.83	6.50***	8.33***	2.11*	7.23***	1.62	4.20***	
Communication													
Pretest	54.52	20.80	60.32	15.68	61.61	14.37							
Posttest	70.52	12.87	60.21	16.27	53.60	16.26	3.83***	5.82***	2.15*	4.23***	0.14	4.12***	
Activity													
Pretest	15.59	10.61	22.57	8.42	17.61	8.72							
Posttest	23.73	8.23	18.92	11.41	13.90	8.73	5.02***	5.62***	0.34	7.11***	2.00	3.02**	
Personal													
management													
Pretest	29.52	11.71	40.07	7.83	36.13	6.72							
Posttest	40.41	8.91	38.32	9.11	30.62	10.80	3.72***	5.71***	1.83	5.62***	1.00	2.92**	
Affective management													
Pretest	43.10	6.11	56.52	10.90	54.40	11.22							
Posttest	62.33	9.90	58.12	13.52	46.44	13.24	3.62***	6.23***	2.72**	6.83***	0.64	3.42**	
Self-satisfaction	02.00	7170		12:02		10.2	5.02	0.25		0.02			
Pretest	15.02	7.42	21.73	7.41	16.14	9.12							
Posttest	24.75	8.23	19.82	8.44	12.81	8.29	4.85***	6.24***	1.22	6.22***	1.33	2.23*	
Self-efficacy total						•							
Pretest	183.33	35.80	231.12	42.92	218.32	43.80							
Posttest	260.01	41.52	223.42	56.72	183.13	56.23	6.61***	9.12***	2.34*	9.53***	0.90	4.71***	

Note. Gp 1 = coping skills instruction. Gp 2 = support group therapy. Gp 3 = no-treatment control. For between-groups comparisons, df = 37. For within-group comparisons, df = 12, 13, and 13 for Gps 1–3, respectively.

\* To adjust significance levels for multiple comparisons, Bonferroni adjustment may be applied by multiplying the significance level by 3 (i.e., the number of comparisons within each variable).

\* p < .05. \*\* p < .01. \*\*\* p < .001.

els of distress and lower mean levels of coping efficacy than patients in the other two conditions.

To adjust for differences between groups at pretest,  $3 \times 2$  (Group  $\times$  Trial) repeated-measures analyses of covariance, using pretest score as the covariate, were performed on all dependent measures. Specific hypotheses concerning between-groups effects were tested with a priori linear contrast comparisons of covariate adjusted posttest means. Within-group changes from pre- to posttreatment were assessed separately for each experimental condition using two-tailed *t* tests for dependent samples.

## POMS

Table 1 presents means, standard deviations, and a summary of the intergroup and within-group statistical analyses for the POMS. Within-group analyses for the coping skills condition revealed marked pre- to posttest reductions on the POMS total score and all six subscales. Between-groups differences at posttest were significant for the POMS total and each of the six subscales. The coping skills patients exhibited significantly lower scores on tension, depression, anger, fatigue, and confusion subscales and higher scores on the vigor subscale compared with support group or no-treatment patients.

Posttest comparisons between support group and no-treat-

ment conditions revealed a significant support group superiority. However, examination of the within-group changes indicated that these findings are primarily the result of a deterioration of mood from pretest levels among the no-treatment patients. With the exception of the Tension-Anxiety and Depression subscales, support group patients showed no significant improvement from their pretest levels.

#### Perceived Self-Efficacy

The results of the analyses conducted on self-efficacy are presented in Table 2. A similar pattern to that of the POMS emerged. Coping skills instruction produced a marked improvement in patients' total self-efficacy score as well as each of the six subscales. The support group therapy patients showed no significant improvement in self-efficacy total, nor any of the efficacy subscales with the exception of a decline in coping efficacy on the Activity subscale (p = .07). In contrast, the notreatment controls exhibited a marked and consistent deterioration of patients' perceived coping efficacy.

Intergroup comparisons of covariate adjusted posttest means resulted in a significant superiority of coping skills over support group and no-treatment conditions for total self-efficacy as well as each of the self-efficacy subscales. Comparisons between the Table 3

	0	. 1	0	- 1	C	. 1	Intergrou	p (t-test) co at posttest	Within-group (t-test) comparisons			
Measure	Gp M	SD	<u>M</u>	p 2 SD	0	• 3 SD	Gp 1 vs. Gp 2	Gp 1 vs. Gp 3	Gp 2 vs. Gp 3	Gp 1	to postte Gp 2	Gp 3
Total severity												
Pretest	106.91	38.22	85.83	32.71	85.90	47.42						
Posttest	67.92	32.11	77.11	35.73	87.23	45.72	2.82**	3.84***	1.12	5.04***	1.22	0.21
Total problems												
Pretest	53.11	12.62	50.22	12.91	48.61	13.62						
Posttest	45.32	19.78	45.05	13.86	49.94	13.89	0.32	2.20*	1.92	2.42*	2.61*	0.50
Average problem intensity												
Pretest	2.04	0.56	1.72	0.54	1.70	0.42						
Posttest	1.51	0.22	1.74	0.38	1.62	0.41	3.73***	3.25**	0.47	4.33***	0.25*	0.82

Intergroup and Within Crown	Companiaona on Canaor	Inventory of Problem Situations
Intergroup and within-Group	Comparisons on Cancer	Inventory of Frontern Situations

Note. Gp 1 = coping skills instruction. Gp 2 = support group therapy. Gp 3 = no-treatment control. For between-groups comparisons, df = 37. For within-group comparisons, ds = 12, 13, and 13 for Gps 1-3, respectively.

\* To adjust significance levels for multiple comparisons, Bonferroni adjustment may be applied by multiplying the significance level by 3 (i.e., the number of comparisons within each variable).

\* p < .05. \*\* p < .01. \*\*\* p < .001.

support group and no-treatment conditions revealed a significant superiority for support group therapy on the total score as well as the following subscales: (a) Coping With Medical Procedures, (b) Communication, and (c) Affective Management.

## CIPS

Table 3 presents means, standard deviations, and a summary of the intergroup and within-group statistical analyses for the three total scores from the CIPS. Consistent with the other measures, coping skills instruction produced significant pre- to posttest improvements in all three CIPS scales. The support group patients reported significantly fewer problems at posttest, while no-treatment patients showed no significant pre- to posttest changes on any of the CIPS total scores.

Intergroup comparisons of adjusted posttest means showed coping skills instruction to be significantly superior to support group therapy on two of the three dimensions of the CIPS (i.e., Total Severity and Average Problem Intensity) and superior to no-treatment controls on all three total score dimensions. No significant differences were found between support group therapy and no treatment.

#### Structured Clinical Interview Ratings

Results of the analyses performed on interviewer ratings revealed a pattern similar to that found with the self-report measures. The coping skills patients exhibited marked improvement from their own pretest distress levels on both therapist, t(12) = 12.22, p < .001, and independent observer ratings, t(12) = 14.14, p < .001. The support group patients exhibited significant improvement on therapist ratings, t(13) = 2.34, p < .05, but not on independent observer ratings, whereas no-treatment patients showed no significant pre- to posttest gains on either therapist or independent observer ratings.

Intergroup comparisons of adjusted posttest means revealed that coping skills patients were rated as being significantly less distressed on both therapist and independent observer ratings than support group and no-treatment patients, whose ratings did not significantly differ from each other.

## Intervention Credibility Evaluation

Patients in the coping skills and support group conditions anonymously completed a 10-item questionnaire to assess their level of satisfaction with various aspects of the treatment experience; t tests for independent samples were conducted on each item and the total score. Results indicated that both groups were equally satisfied with the treatment received, the group content, the group process, and the group leader.

#### Discussion

The present findings lend strong support for the efficacy of group coping skills training to enhance cancer patients' psychosocial adjustment to their illness. Patients exposed to the coping skills training achieved positive treatment gains across a number of different measures, including (a) affect; (b) satisfaction related to work performance, social activities, physical appearance, and sexual intimacy; (c) physical and social activities; (d) cognitive distress; (e) communication; and (f) coping with medical procedures. In contrast, patients receiving supportive group therapy showed little improvement in psychological distress, whereas control patients' psychological functioning deteriorated.

It is unlikely that the consistent superiority of the coping skills treatment over support group therapy was due simply to nonspecific factors such as therapist attention or meeting together with others experiencing similar problems. These factors were present in both the coping skills and the support groups conditions. Our data also suggest that treatment credibility can be ruled out as a rival hypothesis for the differential effectiveness of the two treatments, as credibility assessment at posttest revealed that patients in both conditions were equally satisfied with the group content, the group process, and the group leader. Therapist bias is a potential threat to internal validity, because one of the therapists conducted twice as many groups as the other. However, data from the posttreatment credibility probe argues against this explanation, because both therapists were rated as equally effective.

One possible explanation for the powerful effects of the group coping skills intervention is that these patients regained a sense of personal control and mastery by learning techniques for coping with stressful thoughts, feelings, and behaviors. One way to reduce the distress associated with aversive events is to exert control over them. Moreover, to be effective the control need not be real; the perception of control may be sufficient to aid successful adjustment (Thompson, 1981). Patients receiving the coping skills treatment learned cognitive and behavioral coping strategies that may have enhanced adjustment by expanding coping repertoires and increasing patients' perceptions of control.

Data from the home skills practice records suggest that patients receiving the coping skills instruction actually used these skills in their natural environment. The mean frequency of reported practice episodes per week was 12.3 with a range of from 3 to 25, suggesting that most patients reported using the coping skills on a daily basis. It should be noted, however, that corroboration of patients' reported use of coping skills (e.g., from significant others) was not obtained.

Data on patients' perceived self-efficacy provide some support for the contention that perceptions of control help mediate psychological distress. Regardless of the mode of treatment, increases in self-efficacy were associated with improvements on other indices of psychological distress. Overall, patients receiving group coping skills instruction exhibited marked increases in perceived self-efficacy compared with both the support group and no-treatment controls. In contrast, patients receiving support group therapy showed little improvement on any of the efficacy subscales and control patients' coping efficacy actually declined.

The relative ineffectiveness of support groups in the present study may have been due in part to the heterogeneous patient sample. This may have hindered the development of group cohesion, thought by some (i.e., Yalom, 1975) to be crucial for support groups to be effective. It is also possible that the 6-week intervention was not long enough to bring about significant patient improvement.

The absence of follow-up data needs to be considered. Forty percent of the study participants were unavailable for reevaluation at the scheduled 3-month follow-up assessment. Reasons included death (7 patients), hospitalization or physical incapacitation (5 patients), return to their home country (5 patients), and other extenuating circumstances (1 patient). Because of the high attrition rate, meaningful conclusions regarding the durability of treatment effects cannot be made. Future research is needed to examine the long-term efficacy of group coping skills interventions for cancer patients.

## References

Andersen, B. L., & Hacker, N. F. (1983). Treatment for gynecologic cancer: A review of the effects on female sexuality. *Health Psychology*, 2, 203-221.

- Andersen, B. L., & Jochimsen, P. R. (1985). Sexual functioning among breast cancer, gynecologic cancer, and healthy women. *Journal of Consulting and Clinical Psychology*, 53, 25–32.
- Araoz, D. L. (1983). Use of hypnotic techniques with oncology patients. Journal of Psychosocial Oncology, 1, 47–54.
- Burish, T. G., & Lyles, J. N. (1981). Effectiveness of relaxation training in reducing adverse reactions to chemotherapy. *Journal of Behavioral Medicine*, 4, 65–78.
- Burish, T. G., & Lyles, J. N. (1983). Coping with the adverse effects of cancer treatments. In T. G. Burish & L. A. Bradley (Eds.), Coping with chronic disease: Research and applications. (pp. 159–189). New York: Academic Press.
- Ferlic, M., Goldman, A., & Kennedy, B. J. (1979). Group counseling in adult patients with advanced cancer. Cancer, 43, 760–766.
- Gordon, W. A., Freidenbergs, I., Diller, L., Hibbard, M., Wolf, C., Levine, L., Lipkins, R., Ezrachi, O., & Lucido, D. (1980). Efficacy of psychosocial intervention with cancer patients. *Journal of Consulting* and Clinical Psychology, 48, 743–759.
- Heinrich, R. L., Schag, C. C., & Ganz, P. A. (1983, April). The Cancer Inventory of Problem Situations. Paper presented at the meeting of the Western Psychological Association, San Francisco.
- Jacobs, C., Ross, R. D., Walker, I. M., & Stockdale, F. E. (1983). Behavior of cancer patients: A randomized study of the effects of education and peer support groups. *Journal of Clinical Oncology*, 6, 347–350.
- Jamison, K. R., Wellisch, D. K., & Pasnau, R. O. (1978). Psychosocial aspects of mastectomy: I. The woman's perspective. American Journal of Psychiatry, 135, 432–436.
- Lichtman, R. R., Taylor, S. E., Wood, J. V., Bluning, A. Z., Dosik, G. M., & Leibowitz, R. L. (1984). Relations with children after breast cancer: The mother-daughter relationship at risk. *Journal of Psycho*social Oncology, 2, 1-19.
- Lyles, J. N., Burish, T. G., Krozley, M. G., & Oldham, R. K. (1982). Efficacy of relaxation training and guided imagery in reducing the aversiveness of cancer chemotherapy. *Journal of Consulting and Clinical Psychology*, 50, 509-524.
- Maguire, G. P., Lee, E. G., Bevington, D. J., Kuchemann, C. S., Crabtree, R. J., & Cornell, C. E. (1978). Psychiatric problems in the first year after mastectomy. *British Medical Journal*, 1, 963–965.
- McNair, P. M., Lorr, M., & Droppleman, L. (1971). Profile of Mood States manual. San Diego, CA: Educational and Industrial Testing Services.
- Meyerowitz, B. E. (1980). Psychosocial correlates of breast cancer and its treatment. Psychological Bulletin, 87, 108-131.
- Meyerowitz, B. E. (1983). Postmastectomy coping strategies and quality of life. *Health Psychology*, 2, 117–132.
- Morris, T., Greer, H. S., & White, P. (1977). Psychological and social adjustment to mastectomy. A two-year follow-up study. *Cancer*, 40, 2381–2387.
- Morrow, G. R., & Morrell, L. (1982). Behavioral treatment for the anticipatory nausea and vomiting induced by cancer chemotherapy. *New England Journal of Medicine*, 307, 1476-1480.
- Peck, A., & Boland, J. (1977). Emotional reactions to radiation treatment. Cancer, 40, 180-184.
- Plumb, M. M., & Holland, J. C. (1977). Comparative studies of psychological function in patients with advanced cancer: Self-reported depressive symptoms. *Psychosomatic Medicine*, 39, 264–276.
- Redd, W. H., Andresen, G. V., & Minagawa, R. Y. (1982). Hypnotic control of anticipatory emesis in patients receiving cancer chemotherapy. *Journal of Consulting and Clinical Psychology*, 50, 14–19.
- Redd, W. H., & Hendler, C. S. (1983). Behavioral medicine in comprehensive cancer treatment. Journal of Psychosocial Oncology, 1, 3-17.
- Schag, C., Heinrich, R., & Ganz, P. (1982). Karnofsky Performance Status revisited: Reliability, validity and guidelines. Unpublished manu-

script, Veterans Administration Medical Center and UCLA School of Medicine, Los Angeles.

Schag, C. C., Heinrich, R. L., & Ganz, P. A. (1983). Cancer inventory of problem situations: An instrument for assessing cancer patients' rehabilitation needs. *Journal of Psychosocial Oncology*, 1, 11-24.

- Schonfield, J. (1972). Psychological factors related to delayed return to an earlier life-style in successfully treated cancer patients. *Journal of Psychosomatic Research*, 16, 41–46.
- Spiegel, D., Bloom, J. R., & Yalom, I. D. (1981). Group support for patients with metastatic cancer. Archives of General Psychiatry, 38, 527-533.
- Telch, C. F., & Telch, M. J. (1982). Stanford Inventory of Cancer Patient Adjustment. Unpublished scale, Stanford University.

Telch, C. F., & Telch, M. J. (1985). Psychological approaches for en-

hancing coping among cancer patients: A review. *Clinical Psychology Review*, 5, 325–344.

- Thompson, S. C. (1981). Will it hurt less if I can control it? A complex answer to a simple question. *Psychological Bulletin*, 90, 89-101.
- Vachon, M. L., Lyall, W. A., Rogers, J., Cochrane, J., & Freeman, S. J. (1981). The effectiveness of psychosocial support during post-surgical treatment of breast cancer. *International Journal of Psychiatry in Medicine*, 11, 365–372.
- Weisman, A. D., Worden, J. W., & Sobel, H. J. (1980). Psychosocial screening and intervention with cancer patients (Tech. Rep. No. CA-19797). Bethesda, MD: National Cancer Institute.
- Yalom, I. D. (1975). The theory and practice of group psychotherapy. New York: Basic Books.

Received August 13, 1985 Revision received March 3, 1986 ■

#### Instructions to Authors

Style of manuscripts. Authors should prepare manuscripts according to the *Publication Manual of the Ameri*can Psychological Association (3rd ed.). Typing instructions (all copy must be double-spaced) and instructions on preparing tables, figures, references, metrics, and abstracts appear in the *Manual*. Also, all manuscripts are subject to editing for sexist language.

APA policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more journals. Also, authors of manuscripts submitted to APA journals are expected to have available their raw data throughout the editorial review process and for at least 5 years after the date of publication. Authors will be required to state in their initial submission letter or sign a statement that they have complied with APA ethical standards in the treatment of their sample, human or animal. (A copy of the APA Ethical Principles may be obtained from the APA Ethics Office, 1200 17th Street, N.W., Washington, DC 20036.)

Abstracts. Manuscripts of regular articles must be accompanied by an abstract of 100-150 words. Manuscripts of Brief Reports must be accompanied by an abstract of 75-100 words. All abstracts must be typed on a separate sheet of paper.

**Brief Reports.** The Journal of Consulting and Clinical Psychology will accept Brief Reports of research studies in clinical psychology. The procedure is intended to permit the publication of soundly designed studies of specialized interest or limited importance that cannot now be accepted as regular articles because of lack of space. Several pages in each issue may be devoted to Brief Reports.

An author who submits a Brief Report must agree not

to submit the full report to another journal of general circulation. The Brief Report should give a clear, condensed summary of the procedure of the study and as full an account of the results as space permits. Brief Reports should be limited to three printed pages and prepared according to the following specifications:

To ensure that a Brief Report does not exceed three printed pages, follow these instructions for typing: (a) Set typewriter to a 55-space (pica) or 66-space (elite) line, with 25 lines per page. (b) Type text. (c) Count all lines except abstract (75-100 words), title, and by-line, including acknowledgments. If you have exceeded 325 lines, shorten the material.

In Brief Reports, headings, tables, and references must be counted in the 325 lines. This journal no longer requires an extended report. However if one is available, the Brief Report must be accompanied by the following footnote:

Correspondence concerning this article (and for an extended report of this study) should be addressed to (give the author's full name and address).

The footnote should be typed on a separate sheet and not counted in the 325-line quota.

Submitting manuscripts. Manuscripts should be submitted in triplicate, and all copies should be clear, readable, and on paper of good quality. A dot matrix or unusual typeface is acceptable only if it is clear and legible. Dittoed and mimeographed copies are not acceptable and will not be considered. Authors should keep a copy of the manuscript to guard against loss. Mail manuscripts to the Editor, Alan E. Kazdin, Western Psychiatric Institute and Clinic, University of Pittsburgh School of Medicine, 3811 O'Hara Street, Pittsburgh, Pennsylvania 15213.