
**LEADERSHIP EDUCATION:
EVALUATION OF A PROGRAM
TO PROMOTE RECOVERY IN
PERSONS WITH PSYCHIATRIC
DISABILITIES**

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The concept of recovery for individuals with psychiatric disabilities is an emerging paradigm that has important implications for understanding and treating persons with psychiatric disability. The current study evaluated the effects of a 16-week psychoeducational program designed to promote the recovery process within the context of preparing persons with psychiatric disabilities for participation on community agency boards. The program was evaluated by employing both experimental and wait-list control groups, and by conducting pre-, post-, and six month follow-up outcome assessments. Results indicated that participation in the program was associated with significant improvement across a variety of psychometric measures assessing recovery processes. Results also suggest that changes in feelings of self-efficacy, empowerment, and self-esteem are more stable indicators of recovery than psychiatric symptomatology.

The concept of recovery from severe and persistent psychiatric disability has recently received a great deal of attention in the psychiatric rehabilitation literature. Recovery is still an evolving paradigm in the conceptualization and treatment of individuals with psychiatric disabilities, and the parameters that define recovery remain uncertain. Anthony (1993) has noted that recovery is a multi-dimensional concept and provided a definition of recovery as, "a deeply personal, unique process of changing one's attitudes, values, feelings, goals, skills, and/or roles" (p. 15). Recovery clearly encompasses concepts such as self-esteem, self-efficacy, adjustment to disability, empowerment, and self-deter-

mination. Other constructs which researchers have emphasized as important in the recovery process include hope (Hogan, 1994; Needles & Abramson, 1990), insight regarding one's disability (Greenfield, Strauss, Bowers, & Mandelkern, 1989), social support (McGorry, 1992), spirituality (Lindgren & Coursey, 1995; Young & Ensing, 1999), and the reconstruction of a positive identity (Pettie & Triolo, 1999). Recovery research by Davidson and Strauss (1992), as well as Patricia Deegan's influential work (1988; 1992; 1993; 1996; 1997), has emphasized that developing a new and valued sense of self and purpose are hallmark components of recovery, and has also empha-

sized the need to view recovery as an ongoing process and not a final product.

Reviews assessing the effects of psychiatric rehabilitation programs (Dion & Anthony, 1987) and community support services (Anthony & Blanch, 1989) have noted that much of the outcome research in this area consists of small scale quasi-experimental studies. While the contributions of this research have been acknowledged, investigators have noted that more systematic, long-term assessments of intervention programs need to be undertaken. For instance, Dion and Anthony (1987) noted that in the psychiatric rehabilitation literature there is a lack of studies from which causality can be implied because most studies used single group, post-test only methodologies. More recently, there has also been a call for greater attention to the need for research that "amplifies the voice of the consumer" as a partner in the research process (Rapp, Shera, & Kisthardt, 1993, p. 727), as well as the measurement of treatment outcomes in the context of the emerging recovery paradigm (Ralph & Kidder, 1998). Based on these and other critiques of the existing literature, the present study was designed to provide a more systematic and rigorous evaluation of the effects of the Leadership Education Program by employing both experimental and waiting-list control groups and by conducting pre-training, post-training, and 6-month follow-up assessments. The outcome measurements utilized were focused on recovery processes and the degree to which the Leadership Education Program successfully promoted the recovery process for the group participants. While qualitative as well as quantitative data was gathered to assist in understanding the change processes and outcomes of the Leadership Education Program, the current report focuses on traditional quantitative methodologies used to evaluate the intervention program.

METHOD

Participants/Participant Attrition Analyses

Four groups of persons with psychiatric disabilities (initial $N = 123$ with approximately 30 per group) were recruited to participate in the Leadership Education Program, a psychoeducational group treatment program which involved meeting once weekly for 16 sessions. Participants were recruited via fliers posted at local community mental health centers and via word of mouth from previous program participants. Persons recruited for the second and third of these training groups were initially placed on a waiting list prior to beginning the program. Sample attrition for those individuals initially on a waiting list was 23.9%. Thus, the final number of people to actually begin the training program was 94. Over the course of the 16 training sessions, the median number of training sessions attended by participants was 12, while the average number of sessions attended following the commencement of training was 9.6 ($SD = 5.4$; range = 1 to 16).

A decision was made to categorize those individuals who completed less than five sessions (one standard deviation below the mean attendance) as training dropouts. Thus, only those participants who ultimately completed five or more sessions of the Leadership Education Program were included in analyses of either training group or control group data. Using these constraints, the attrition rate for individuals who began the program was 19.5% and the final sample sizes of the four groups were: group 1, $N = 26$; group 2, $N = 14$; group 3, $N = 12$; and group 4, $N = 16$ (for a total $N = 68$ participants who completed five or more training sessions). Demographic and psychiatric data describing the final sample of participants included in the outcome analyses are presented in Table 1.

Chi-square and t tests were conducted on the demographic and self-reported psychiatric data to compare individuals who completed the training program with individuals who dropped out. These analyses found no significant differences between the two groups for (a) gender, (b) ethnicity, (c) marital status, (d) education, (e) employment, or (f) use of psychiatric medication. There were also no differences between the dropout group and the completing group on the number of psychiatric hospital admissions or on how long they had been diagnosed with a psychiatric disability. The only significant difference between persons in the attrition group and persons who completed the training program was age. The average age of those who dropped out of the program was younger ($M = 37.7$) than the average age of those who completed the program ($M = 45.7$), $t(86) = 3.49$, $p < .01$. Chi-square analyses and t tests also indicated no significant differences between the four training groups with respect to the demographic and psychiatric data.

Procedures

Design of the program. Prior to designing the Leadership Education Program, both research and leadership program personnel met with an advisory group of ten persons with psychiatric disabilities who were active members of the local "Consumer's Union." The members of the advisory group provided input regarding the topics they considered helpful in a program designed to promote recovery, and they also assisted in framing the language of the program in a way that reflected the perspective of persons with psychiatric disabilities. Information obtained during additional individual interviews and from focus groups addressing the recovery process was also utilized when designing the program curriculum and choosing measures to evaluate recovery processes (see Young & Ensing, 1999).

The Training. The Leadership Education Program is a 16-week psychoeducational program that prepares people with psychiatric disabilities for leadership positions on community agency boards and board committees. The training curriculum is divided into three major segments: Attitude and self-esteem, group dynamics and group process, and board/committee functions and policy development.

Participants attend a 2-hour training session once per week. Through lecturing, small group process, and experiential learning, a different topic is explored weekly. (See Appendix A.) Participants receive a training booklet and complete homework assignments. Following completion of the program, participants are assisted with seeking placement on the boards or committees of community agencies. Some program graduates were also subsequently employed as project staff members for the second, third, and fourth training classes and became integral program staff members, assisting in recruiting participants, organizing weekly meetings, and providing logistical and social support for group members. The first three training groups were implemented and led by the professional staff members who designed the program curriculum. The fourth training group continued the trend towards greater involvement of program graduates in subsequent program implementation. This group was different from the previous three training groups in that the leadership program curriculum was conducted and facilitated primarily by graduates of earlier leadership groups, who had also completed an additional peer training program.

Measures

Quantitative outcome measures were selected on the basis of the following criteria:

- a) they assessed content areas important to recovery as previously identified by a peer focus group,
- b) they were psychometrically reliable and valid,
- c) they, as a whole, assessed a broad range of recovery experiences, and
- d) they were appropriate for individuals with psychiatric disabilities.

Table 1—Demographic Data for Participants (N = 68)

VARIABLE	M	SD	RANGE
Age:	45.7 years	9.17	20–61
Years with Psychiatric Disability: (self-described)	18.6 years	12.9	1–49
Number of Psychiatric Hospitalizations:	4.7	5.8	0–30
VARIABLE	N	(%)	
Gender:			
Women	50	(73.5%)	
Men	18	(26.5%)	
Ethnicity:			
African American	15	(22.0%)	
European American	45	(66.2%)	
Latino	2	(2.9%)	
Other	6	(8.8%)	
Education:			
College graduate	17	(25.0%)	
Technical school/some college	33	(48.5%)	
High school graduate	13	(19.1%)	
9th–11th grade	3	(4.4%)	
8th grade or less	2	(2.9%)	
Annual Income:			
\$20,000 or more	2	(2.9%)	
\$15,000–\$19,999	4	(5.9%)	
\$10,000–\$14,999	11	(16.2%)	
\$5,000–\$9,999	31	(45.5%)	
Less than \$5,000	20	(29.4%)	
Employment:			
Full-time	3	(4.4%)	
Part-time	11	(16.2%)	
Unemployed	54	(79.4%)	
Marital Status:			
Single	37	(54.4%)	
Married	9	(13.2%)	
Separated/divorced	22	(32.3%)	

Table 2—Mean Scores on Recovery Measures Pre-Training vs. Post-Training for All Participants¹

MEASURE/SUBSCALE ²	PRE-TRAINING		POST-TRAINING		EFFECT SIZE	DEPENDENT	
	MEAN	(SD)	MEAN	(SD)		<i>t</i>	<i>p</i>
Empowerment							
<i>Total empowerment</i>	81.3	(11.4)	85.3	(12.0)	.34	3.46	.001**
<i>Self-esteem</i>	27.2	(5.3)	28.8	(4.9)	.31	3.05	.003**
<i>Power/powerless</i>	21.5	(3.5)	22.4	(3.7)	.25	2.04	.046*
Activism	19.7	(2.9)	20.2	(2.9)	.18	1.31	.195
Optimism	11.6	(2.5)	12.0	(2.4)	.17	1.75	.085
<i>Righteous anger</i>	10.4	(2.4)	11.3	(2.7)	.35	2.82	.006**
Community Living Skills							
<i>Total score</i>	101.8	(18.5)	107.1	(18.5)	.28	4.37	.000**
<i>Personal care</i>	43.6	(8.6)	45.9	(8.1)	.29	3.58	.001**
<i>Social relationships</i>	36.1	(6.8)	37.9	(6.6)	.28	3.49	.001**
Activities and leisure	10.0	(3.5)	10.7	(3.6)	.20	1.93	.058
Vocational skills	12.1	(3.2)	12.5	(3.1)	.11	.80	.337
Recovery Attitudes							
Total score	82.2	(9.6)	83.8	(10.1)	.16	1.75	.086

¹ *N* = 62 participants across the four training groups who completed five or more leadership training sessions and completed both pre- and post-training measures

² Subscales with significant dependent *t* test (significant difference at post-training) are italicized. (* *p* < .05; ** *p* < .01)

The Empowerment Scale (“Making Decisions” Scale) was used to measure participant’s feelings of empowerment and control over their own lives (Rogers, Chamberlin, Ellison, & Crean, 1997). The Empowerment Scale contains five nonindependent subscales of self-esteem, power, activism, optimism, and righteous anger. The Community Living Skills Scale (Smith & Ford, 1990) was used to measure daily life functioning, including personal care, socialization and relationships, activities and leisure skills, and vocational skills. The Recovery Attitudes Questionnaire (Steffen & Borkin, 1997) was used to measure participant’s attitudes about recovery and the recovery process. The Quality of Life Inventory (Frisch, Cornell, Villanueva, & Retzlaff, 1992) was used to measure participant’s perceived importance of, and satisfaction with, 16 life domains: self-esteem, goals and values, money, work, play, learning, creativity, helping, love, friends, children, relatives, home, neighborhood, and community. McDermott’s (1995)

Self-Efficacy Scale (“Confidence” Questionnaire) was used to measure three content domains, including confidence in one’s ability to control positive symptoms, negative symptoms, and social relationships. Finally, the COMPASS Treatment Assessment System (COMPASS Information Services, 1995) was used to measure self-reported severity of psychiatric symptoms. The COMPASS has five symptom scales (depression, anxiety, psychosis, mania/hypomania, and substance abuse) which were analyzed for this report. These symptom scales are averaged to obtain a total symptoms measure. On all of the scales except the COMPASS, higher scores indicate better functioning. On the COMPASS higher scores indicate more severe symptomatology. Additional background, scoring, and psychometric information regarding these and other recovery measures may be found in a recent review by Ralph and Kidder (2000).

Research Design

For the first three training groups, the study used a waiting-list control design,

with pre-testing prior to training, post-testing after training, and a 6-month follow-up assessment. Specifically, group 1 and group 2 were tested at the same time. Following pretesting, group 1 participated in the Leadership Education Program, while group 2 was placed on a waiting list and served as a concurrent control group for group 1. Next, group 2 and group 3 were tested at the same time. Group 2 then participated in treatment while group 3 was placed on a waiting list and served as a concurrent control group. Finally, group 3 participated in the training. Measures were administered to participants in the first three training groups at the following times: At the time they began serving as a control group (with the exception of group 1), after participating as a control group (with the exception of group 1), before participating in the Leadership Education Program, after participating in the training, and 6 months following the completion of the training. Training group 4, which was consumer led, was initiated following the 6-month follow-

Table 3—Mean Scores on Outcome Measures Pre-Training vs. Post-Training Training Group 1 vs. Wait-Listed Control Groups 2 and 3 Combined¹

MEASURE/SUBSCALE ³	TRAINING GROUP 1 (N = 23)		CONTROL GROUPS 2 & 3 (N = 23) ²		ANCOVA F	p
	MEAN SCORE		MEAN SCORE			
	PRE	POST	PRE	POST		
COMPASS: Self-Rated						
<i>Total Symptoms</i>	1.30	.99	1.12	1.28	7.65	.008**
Depression	1.70	1.25	1.58	1.48	1.09	.30
Anxiety	1.65	1.19	1.10	1.33	1.49	.23
<i>Mania</i>	1.31	1.17	1.12	1.66	5.49	.02*
Psychosis	.56	.48	.60	.73	3.60	.063
Substance abuse	.61	.50	.94	.93	1.49	.228
Quality of Life—Avg.	1.20	1.77	.58	.93	2.00	.16
Self-Efficacy						
<i>Total symptoms</i>	402.7	426.7	407.6	382.7	4.49	.04*
Positive symptoms	158.5	162.5	159.7	149.6	2.64	.11
<i>Negative symptoms</i>	114.0	123.0	116.6	109.7	6.24	.02*
<i>Social relationships</i>	129.7	141.2	131.3	123.4	5.83	.02*
Recovery Attitudes						
Total Score	80.6	84.3	80.1	80.1	3.58	.06
Empowerment						
<i>Total Empowerment</i>	81.3	86.4	84.6	83.1	5.18	.03*
Self-esteem	27.5	29.4	28.4	27.9	2.50	.12
<i>Power-powerless</i>	20.5	22.2	22.5	21.7	4.05	.05*
Activism	19.7	20.8	20.2	19.9	2.21	.14
Optimism	11.9	11.7	11.2	11.3	.28	.60
Righteous anger	10.0	11.1	10.7	10.7	2.46	.12
Community Living Skills						
<i>Total score</i>	102.7	107.5	103.5	97.3	15.6	.000*
<i>Personal care</i>	43.4	45.7	43.9	42.6	5.30	.03*
<i>Social relationships</i>	36.5	38.2	37.0	33.6	22.3	.000*
Activities and leisure	10.6	10.8	9.73	9.17	2.81	.10
<i>Vocational skills</i>	12.2	12.7	12.8	11.8	4.91	.03*

¹ Training and wait-listed control groups are comprised of individuals who completed five or more leadership training sessions.

² Data from Groups 2 and 3 were combined to increase the power of the analyses and to achieve parity in sample sizes.

³ Subscales with significant ANCOVA *F* (significant group differences at post-training) are *italicized*. (* $p < .05$; ** $p < .01$)

up assessment for training group 3, so that training group 3 did not have a concurrent control group. Participants in the training group 4 were also administered a shorter assessment battery consisting of the Community Living Skills Scales, Empowerment Scale, and the Recovery Attitudes Questionnaire. Group 4 was tested prior to, and after, completing the program, and at 6-month follow-up. All measures were completed in a group setting. Participants were paid \$20 each

time they completed the set of research measures.

RESULTS

To make an initial overall determination of the degree of change as a result of the Leadership Education Program, paired (dependent) *t* tests were conducted for the four treatment groups combined as a whole, comparing the mean scores from pre- to post-treatment on the three measures completed by all participants (Empowerment Scale, Community

Living Skills Scales, and Recovery Attitudes Questionnaire). Effect sizes for these paired *t* tests were also calculated to provide an index of how large the treatment effects were (Cohen, 1988). Results of the dependent *t* tests and effect size analyses are presented in Table 2. The mean total scores for both the Empowerment and Community Living Skills measures were found to be significantly higher at post-treatment compared to pre-treatment (i.e., in the direction of greater recovery at

post-treatment). In addition, the Empowerment subscales of self-esteem, power, and righteous anger were also significantly higher at post-training, as were the Community Living Skills subscales of personal care and social relationships. The range of effect sizes for these statistically significant differences (.28 to .35) were between “small” to “medium” effects (Cohen, 1988).

The next series of analyses focused on comparisons between participants in the first three training groups, in which participants in groups 2 and 3 served as controls by completing the measures before and after their waiting-list period, as well as prior to and after completing the program. First, Analyses of Covariance (ANCOVA) were conducted using participant’s post-training scores as the dependent variable and participant’s pre-training scores as the covariate. Table 3 presents the outcome results for participants in training group 1 compared to a combination of the two waiting-list control groups. As can be seen in Table 3, participants in training group 1 showed significantly greater improvement compared to individuals in the waiting-list control groups on the total scores for the following recovery measures: COMPASS self-rated symptoms, self-efficacy, empowerment, and community living skills. On the more specific subscales contained within these measures, the training participants also reported significant improvement relative to those on the waiting-list in their ability to control negative symptoms and social relationship aspects of their psychiatric symptoms (Self-Efficacy Scale), as well as greater personal power (Empowerment Scale), and improved social relationships, personal care and vocational skills (Community Living Skills Scale). A trend towards a better overall attitude towards recovery was also present for the participants in the training compared to individuals in the wait-listed control group ($p = .06$).

ANCOVA analyses specifically comparing individuals from group 2 after receiving training to their control group (group 3) were also conducted. Although the sample sizes for this comparison were smaller ($n = 14$ and $n = 12$, respectively), the outcome results were strikingly similar to those shown by group 1. After training, group 2 showed significantly greater improvement than their concurrent wait-listed controls on the total score for the Community Living Skills scale [$F(1,22) = 7.76, p < .05$], as well as significantly better scores than the wait-listed control group for the specific subscales of personal care [$F(1,22) = 6.14, p < .05$], social relationships [$F(1,22) = 8.07, p < .01$], and activities/leisure [$F(1,22) = 5.30, p < .05$]. Greater improvements for group 2 relative to their controls were also found for the total score on the Self-Efficacy Scale [$F(1,20) = 6.30, p < .05$] as well as the specific subscale of social symptoms [$F(1,20) = 11.15, p < .01$]. Additional trends included greater feelings of empowerment, greater self-efficacy, and lower levels of self-reported psychiatric symptoms. While statistical significance of some outcome results were not replicated across both group 1 and group 2 following training, the pre/post change on all of the measures were in the same direction and of approximately the same magnitude for all groups following training.

Finally, a series of within-subjects, repeated measures Analysis of Variance analyses (ANOVA) were performed assessing pre-training, post-training, and 6-month follow-up data collected from participants in groups 1, 2, and 3 for the COMPASS, quality of life, and self-efficacy measures, and from participants in all four training groups for the recovery attitudes, community living skills, and empowerment measures. The results of these analyses are presented in Table 4. As can be seen in Table 4, significant improvements from pre-training to post-

training were made in many of the recovery areas measured, both for total scores as well as specific subscales. These significant improvements included

- 1) psychiatric symptom reduction (particularly reported levels of depression and anxiety),
- 2) self-efficacy (confidence in an ability to control positive, negative, and social symptoms),
- 3) community living skills (particularly personal care and social skills),
- 4) empowerment (particularly self-esteem), and
- 5) recovery attitude.

In addition, some of these improvements appeared stable at the 6-month follow-up assessment, specifically, the total score on the Self-Efficacy Scale, the total score for the Community Living Skills Scale, and the total score for the Empowerment Scale. In addition, the empowerment subscale of self-esteem continued to maintain a significant improvement from pre-training levels, as did the self-efficacy subscale of social symptoms. In contrast to these apparent continued benefits at 6-month follow-up, the initial improvements that were observed post-training in recovery attitudes, symptomatology as measured by the COMPASS subscales, quality of life, and the personal care subscale appeared to diminish over the 6-month time frame. In the case of the COMPASS depression and anxiety subscales, the participants actually increased in reported depression and anxiety at the time of the 6-month follow-up, so much so that the symptomatology levels essentially returned to baseline (pre-training) levels, and as such were significantly worse at the six month follow-up compared to immediately post-training. The one area that showed moderate improvement at post-training and then showed continued significant improvement from post-

Table 4—Results of Within-Subjects ANOVA Across Participants on Pre-, Post-, Follow-Up Data for Outcome Measures and Subscales³

MEASURE/SCALE	MEANS			<i>F</i>	<i>p</i>	PAIRWISE <i>p</i> VALUES		
	PRE	POST	FU			PRE/POST	PRE/FU	POST/FU
COMPASS¹								
<i>Total symptoms</i>	1.25	.94	1.32	1.48	.234	.000**	.882	.298
<i>Depression</i>	1.59	1.21	1.46	8.23	.000**	.000**	.327	.035*
<i>Anxiety</i>	1.67	1.15	1.48	8.06	.000**	.000**	.290	.045*
Psychosis	.61	.47	.50	2.07	.137	.142	.282	.922
Substance abuse	.58	.38	.28	2.19	.122	.361	.110	.777
Mania	1.57	1.28	1.30	2.91	.063	.081	.132	.970
Quality of Life¹	1.13	1.66	1.59	2.05	.136	.071	.167	.846
Self-Efficacy								
<i>Total symptoms</i>	393.6	438.3	468.0	11.50	.000**	.001**	.001**	.522
<i>Positive symptoms</i>	153.6	171.5	163.5	5.75	.005**	.004**	.158	.290
<i>Negative symptoms</i>	115.3	127.7	124.0	5.55	.006**	.005**	.069	.588
<i>Social symptoms</i>	135.7	152.4	149.0	9.00	.000*	.000**	.000**	.692
Recovery Attitudes²								
<i>Total score</i>	83.4	85.8	84.5	3.30	.041*	.038*	.159	.305
Community Living Skills²								
<i>Total score</i>	102.3	107.6	105.6	6.17	.003**	.000**	.048*	.155
<i>Personal care</i>	43.3	46.1	44.8	6.49	.002**	.001**	.123	.013*
<i>Social relationships</i>	36.7	38.0	37.2	3.06	.045*	.010**	.521	.131
Activities/leisure	10.0	10.8	10.3	1.95	.147	.060	.363	.178
Vocational skills	12.3	12.7	13.2	2.81	.065	.337	.022*	.440
Empowerment²								
<i>Total score</i>	83.0	86.8	85.4	4.92	.009**	.001**	.038*	.424
<i>Self-esteem</i>	27.8	29.5	28.3	3.03	.048*	.025*	.031*	.654
Power	21.8	22.7	22.8	2.30	.105	.054	.079	.647
Activism	20.0	20.3	20.2	1.96	.147	.472	.507	.685
Optimism	11.8	12.3	11.8	2.37	.099	.106	.885	.679
Righteous anger	10.5	11.5	11.1	1.48	.232	.060	.139	.126

¹ *N* = 35 for pre/post-follow-up analyses (completed measures available from groups 1, 2, & 3).

² *N* = 50 for pre/post-follow-up analyses (completed measures available from groups 1, 2, 3 & 4).

³ Subscales with significant overall *F* are *italicized*. Subscales that remained significantly improved at 6-month follow-up are *bold-italicized*. (* *p* < .05, ** *p* < .01)

test to 6-month follow-up was the vocational skills Subscale. This last finding most likely reflects the fact that, by the time of 6-month follow-up, many of the participants were actively involved in local community mental health services, in either agency positions or on the agency boards as consumer representatives.

DISCUSSION

The concept of recovery for individuals with psychiatric disabilities is an emerging paradigm that has important implications for both the understanding and treatment of persons with serious and persistent mental illness. The current study evaluated the effects of a 16-week psychoeducational program, the Leadership Education Program, that was specifically designed to promote the recovery process in mental health con-

sumers within the context of preparing persons with psychiatric disabilities for leadership positions on community agency boards. The results of this evaluation strongly suggest that a psychoeducational program designed to promote community leadership in individuals with psychiatric disabilities produced significant improvement across a variety of psychometric measures associated with the process of recovery from mental illness. Strengths of the current study include the use of a multidimensional

assessment battery to better understand what aspects of recovery may be affected by such interventions, and the use of a wait-listed control group design to comparatively evaluate the effects of the training program. The improvements seen at post-training were not simply due to the passage of time, nor to the simple attention of researchers administering psychometric measures multiple times. Each of the first two training groups fared significantly better than its concurrent wait-listed control counterpart. Although the effect sizes for the many statistically significant outcomes fall within the "small" to "moderate" range, the fact that this Leadership Education Program was successful with four separate training groups, one of which was primarily consumer facilitated, speaks to the consistency and strength of the effects found, as well as the replicability of the Leadership Education Program.

Clinical areas that were particularly affected by this intervention program included increased feelings of empowerment, increased feelings of self-efficacy, improved community living skills, and more transient reductions in reported psychiatric symptomatology. Although the immediate goal of the training program was to foster leadership skills among mental health consumers in order to create successful members on community mental health agency boards, the results of the program evaluation clearly suggest that the broader issue of recovery for persons with psychiatric disabilities is a process that can be successfully promoted by a psychoeducational intervention. The design of the current study also highlights the value of including persons with psychiatric disabilities in the process of conducting research in the area of psychiatric rehabilitation. In the current study, individuals with psychiatric disabilities played integral roles in the de-

velopment, implementation, and evaluation of the program.

Limitations of the current study and its design include the level of participant attrition, particularly for those people who initially started as control group participants during the 16-week waiting-list period, but dropped out prior to beginning the program. Although only those people from the control groups who ultimately participated in the training were compared to those who were in the concurrent treatment groups, there is certainly a likelihood that the level of motivation was high for those who went through the waiting-list period and then went on to successfully complete the program. There was also some indication that the level of time commitment necessary to complete the training program (2 hours per week for 16 weeks) was more burdensome for younger participants, who were more likely to have additional family, educational, or occupational commitments. Finally, in terms of generalizing the sample, demographic data available to describe the participants suggests that while the sample was representative of individuals with psychiatric disabilities on most salient variables (such as income level and number of psychiatric hospitalizations), there were some likely differences from other studies using samples of persons with psychiatric disabilities. For example, the current sample consisted primarily of women (73.5%) and participants had more formal education than might be found in other settings (48.5% had at least some technical school or college education and 25% were college graduates). These sample characteristics are likely to be a reflection of some level of self-selection by the participants as a function of both the nature and the goals of the Leadership Education Program.

With regard to the longevity of the benefits of the training program, it appeared

that several of the positive effects of leadership education were stable over a 6-month follow-up period. In particular, feelings of greater self-efficacy, empowerment, and self-esteem appeared to maintain their post-training increases. The significant improvement in self-reported vocational skills at the 6-month follow-up is most likely a specific effect consistent with the explicit goal of the Leadership Education Program to help place consumers in leadership roles in community mental health agencies. In contrast to those effects that appeared to be stable over the 6-month follow-up period, some initially positive effects post-training clearly diminished over this same time period, including initial gains in the recovery attitudes measure. Most notable, however, were the reductions in self-reported psychiatric symptoms of anxiety and depression immediately after training, which returned to a level at 6-month follow-up that was no different from pretraining, and hence was significantly worse than immediately after training. This finding suggests that changes in feelings of self-efficacy, empowerment, and self-esteem are likely to be more stable indicators of the personal level of recovery than waxing and waning psychiatric symptoms. This conclusion is consistent with the emphasis by Deegan (1993; 1996; 1997) that the process of recovery is best measured by a sense of self-value and not by ones' symptomatology.

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