Enlisting Indigenous Community Supporters in Skills Training Programs for Persons With Severe Mental Illness

Robert Tauber, M.A.
Charles J. Wallace, Ph.D.
Tania LeComte, Ph.D.

Objective: This study evaluated the generalization of skills training for severely and persistently mentally ill individuals who were paired with indigenous supporters. The supporters monitored the individuals' environments and prompted them to use their skills. Methods: A total of 85 individuals with severe and persistent mental illness received six months of skills training. Forty-five of the participants received support from an individual of their choosing. The other 40 participants did not have supporters. At the end of the six-month skills training period, the supporters' participation was officially terminated, although they were encouraged to remain in their role for as long as both parties felt comfortable. The effects of the support were measured in terms of inter-personal functioning, acquisition and retention of the skills, psychopathology, global functioning, and satisfaction. Several process measures were also collected. Results: The support procedures were evaluated favorably by both patients and supporters. The interpersonal functioning of the group with supporters was found to be significantly better than that of the non-supported group at six- and 12-month follow-ups. No differences were found between the groups in symptoms—which were minimal during the entire training period—or skills learning and retention. Conclusions: The effects of support are likely applicable for a variety of individuals, supporters, and facilities. Indirect evidence suggested the importance of providing support for the supporters.

Psychiatric Services 51:1425-1432, 2000

Several reviews have concluded that skills training helps persons with severe and persistent mental illness acquire functional behaviors and retain skills largely intact for up to two years. This positive outcome was found across diverse settings, trainers, and skills (1-5). However, the reviews conclude that there is little evidence that individuals transfer behaviors from training to their own living environments, except in the rare case where the training and living environments are the same, such as long-stay inpatient facilities. The general approach to increasing skills transfer is to provide support in the form of advice about adapting the skills to the living environment, encouragement to try them in that environment, and assistance when the skills are unsuccessful.

The types of support that have been studied include support provided by participants in a common psychosocial educational program (6), a telephone "help line" of peers who provided rapid assistance (7), and teaching individuals to contact community treatment staff and obtain their own support after brief inpatient treatments (8).

These methods contradict the support, delivering it from a common location that fits the needs of the supporters. Some authors have suggested that skills transfer could be increased if the support was provided in actual living environments and if the environment was tailored to maximize the performance of the skills (9,10).

Although case managers could provide on-site support, they typically have large caseloads and limited knowledge about such environments, and they would have to consider their transportation costs and time. Alternatively, an indigenous supporter—that is, someone who lives well and interacts with a mentally ill person, is positively accessible, and to whom the well person's particular environment—could be enlisted to prompt the use of learned skills when opportunities arise and help deliver the expected outcomes.

A relationship between a mentally ill person and a supporter could also be valuable per se. Social support has been correlated with decreased impa-
tient admission rates, higher levels of functioning, fewer negative symp-
toms, good physical health in stressful conditions, and enhanced coping re-
sponses (11-16).

Despite the potential value and minimal cost of implementing the role of indigenous supporters, no stud-
ies of recruiting and training them and measuring their effects on out-
comes have been conducted. This ar-
ticle reports the results of such a study.

Methods

Participants

A total of 166 persons with severe and persistent mental illness who were re-
cieving care from the case manage-
ment team of a public mental health system participated in the study. The criteria for selection were age be-
tween 25 and 55 years; a primary DSM-IV diagnosis of schizophrenia, a schizoaffective disorder, or a major mood disorder; at least one episode of treatment in an inpatient facility of at least five days duration in the previ-
ous 12 months, but not more than a cumulative total of two years of inpa-
tient treatment in the past five years; living in a residential care facility; and not enrolled in a long-term rehabilita-
tion program.

Sixty-four participants (37.3 per-
cent) had been diagnosed as having schizophrenia or schizoaffective disorder and the remainder with a major mood disorder. Fifty-three particip-
ants (62.5 percent) were male. Sixty-
eight (80 percent) were Caucasian, ten (11.8 percent) Hispanic, five (6.2 percent) African American, and two (2.4 percent) Asian. Sixty-seven (77.6 percent) had never been married, 15 (17.6 percent) divorced or sepa-
rated, and four (4.7 percent) were married. Average age was 36.2 years, and average education was 12.1 years.

Procedures

All 85 participants received six months of skills training conducted with four of the UCLA Social and In-
dependent Living Skills modules—medication management, symptom management, recreation for leisure, and basic conversation skills (17). The training was administered in a group format for three hours a day, three
days a week. Absences were made up on the two days during which no training was scheduled.

Participants were enrolled in se-
quential cohorts of eight over a two-
and-a-half-year period, from June 1996 to January 1998. The support procedures were developed and funded approximately halfway through the study period. Hence the first 40 participants received training without the support procedure, and the next 45 received skills training with support. Four of the participants who were receiving skills training only and four of those who were receiv-
ing training plus support did not com-
plete the program. Comparison of the demographic characteristics of the re-
main ing participants showed no sig-
ificant differences between the groups.

During their first month of skills training, the 45 participants in the training-plus-support group were asked to list people in their environ-
ments who were accessible, pleas-
tant, and knowledgeable about the environments' resources and lim-
itations, and who would likely serve as supporters. Participants ranked their selections in order of preference, and project staff contacted the highest-ranked persons and solicited their
agreement to help. Only two refused, and in both cases the second-highest-
ranked person was contacted and agreed to assist.

At the end of the first month of skills training, each project staff met with each participant-supporter pair to explain the support procedures. The procedures consisted of two meetings between participant and supporter to review the participant's use of the skills learned during training, to explore the occurrence of less-than-satisfactory use—for example, environmental obstacles or lack of opportunity—and to generate a method to improve skills use. No constraints were placed on the fre-
quency, topics, or duration of a pair's meetings. The pair was told that the procedures were intended to be pleasant and rewarding, and it was left to the pair's discretion to tailor the meetings to fit each partner's needs and comfort.

The supporters were given an overview of the format and content of the skills training modules. Each pair was provided with a support plan rating sheet that listed the skill taught in each module. Space was provided to record whether a meet-
ing focused on the opportunities to use the skills, the obstacles that im-
peded their use, or retraining for using the skills. Project staff met biweekly or monthly with each pair to review the use of the rating sheet, monitor data collection, and resolve problems. At the end of the six months of skills training, project staff
met to meet formally with the pairs, but the pairs were encouraged to continue their relationship with staff members. Staff members pro-
vided informal assistance to a pair upon request by either member.

Measure of participant supporter relationship

After the 45 participants had domi-
nated their supporters and the sup-
porters had agreed to take part in the study, the participants were asked the reasons for nominating a particular person, the duration of their relation-
ship, and, on average, how often they contacted one another, how long these contacts lasted, and the general topics of the contact. Participants also
rated the amount of emotional func-
tional, and informational support they
received from and gave to their nom-
inee on a 5-point scale, from none to a
lot. Emotional support was defined as "a caring relationship (with) some-
one who makes you feel better when things aren’t going well"; functional
support was with "someone who
would run an errand for you"; and in-
formational support was with "some-
one who provides facts, advice, or di-
rectives."

At each meeting with a pair, project
staff asked the supporters to rate their
satisfaction with their role on a 7-
point scale, from terrible to delight-
ed. Participants rated their satis-
faction with the entire process on
the same scale at the beginning and at
the end of the support procedures.

Outcome measures

Measures of outcome were adminis-
tered to both the training-only group
and the training-plus-support group
at four intervals immediately before
the skills training program began, im-
mediately after it was completed, and
at six-months and 12-months after
program completion. The measures
consisted of the Assessment of In-
terpersonal Problem-Solving Skills
(AIPSS) (15), the Comprehensive
Module Tests (CMTs) (17), the
UCLA Expanded Brief Psychiatric
Rating Scale (expanded BPRS) (19),
and the Global Assessment Scale
(GAS) (20).

The AIPSS is an individually ad-
mministered interview-role play test
comprising 13 brief videotaped in-
terpersonal vignettes, ten of which por-
tray problems such as requesting the
use of a new neighbor’s phone to
arrange for installation of utility ser-
VICES. Each vignette is viewed sepa-
rately, and the interviewer asks ques-
tions to assess respondents’ recogni-
tion of a problem, their understand-
ing of its nature, and the adequacy
of the solution they generate to solve it. Respondents then role play their so-
lutions, and the role play is scored for
problem-solving adequacy, the qual-
ity of their paralinguistic elements, such as voice volume and eye contact, and
its overall adequacy.

The CMTs—one per module—
are interview-role play quizzes of
the respondents’ knowledge and performance of the specific infor-

mation and skills presented in that
module. Answers or role plays are
scored using detailed criteria listed on
the score sheet. The expanded
BPRS is a semistructured inter-
view that assesses 24 symptoms of
psychopathology, scored on a 7-
point scale from not at all to severe.
The GAS is a summary rating of the
respondent’s social and psychiatric
functioning based on all relevant in-
formation from the respondents and
their informants. The outcome measures were ad-
mministered by two interviewers who
were hired solely to collect data and
who were not informants, and then
support procedures. Participants
were cautioned by project staff not to
discuss their treatment with the inter-
viewers. The interviewers were trained to administer and score the tests by the
UCLA Intervention Re-
search Center for Psychiatry. Training
involved didactic presentations, role-
played interviews, and ratings of
videotaped situation administration
tests. Ratings were made then on a
blind basis and based on the test admin-
istrations just after their completion to
monitor the fidelity of the procedures
and scoring.

Results

Supporters and the
supporter relationship

Because of participants’ moves and
staff turnover, ten supporters were
changed once during the five months
of the support procedures, and three
were changed twice. Of the 52 sup-
porters chosen—39 initial choices
and 13 replacements—32 (61.2 per-
cent) were residential care staff or
otherwise immediately available staff
members; 15 (28.6 percent) were
friends, partners, or someone who lived
in the same residence or nearby,
three (6.1 percent) were family mem-
bers; and two (4.1 percent) were less-
available staff members.

Thirty-six supporters (69 percent)
were chosen because they were nice or
responsive, 11 (21.2 percent) be-
cause they were knowledgeable and
intelligent, and five (9.6 percent) be-
cause they were available. Fifty-four
percent were female. The relation-
ships between participants and sup-
porters were almost evenly divided
between short-term (less than six
months) and long-term (more than six
months), and in general relationships
were generally with residential staff
and the long-term with friends and
residential care core.

Participants and supporters met
less frequently during the training
program than before (means SD—
10.52, S.D. times a month compared
with 17.7±8.16). However, the meet-
ings were longer (30 minutes mini-
 mum compared with 2.9±2.81). Be-
fore the program, the topic of most
of the meetings (88 percent) involved
leisure or unspecified activities. Dur-
ning the program, 38 percent of the
meetings involved skills training ma-
terials and 52.4 percent involved
leisure and miscellaneous activities.
The skills training interactions fo-
cused on the more structured and
user-friendly training materials such
as the self-assessment rating sheet in
the motivational management module
and the persistent symptoms rating
sheet in the symptom management
module. The materials were clinically
relevant and provided a neutral format for discussing personal infor-
mation.

Only one supporter characteristic
was associated with the frequency of
the partners’ interactions: satisfaction of the supporters with their role. The
more supporters were satisfied with
their role, the more often they met
with participants (r=0.65, p<.001)
and the more often they met the
meetings to discuss the skills training
and its associated materials (r=.461,
1 p<.01). No other characteristics—for
example, age, BPRS scores, educa-
tion, or length of the relationship—
was associated with the frequency of
the meetings.

Both participants and supporters
were quite satisfied with the relation-
ships. For all three types of support
measures, participants rated them-
seves as receiving significantly more
support than they gave (emotional
r=.67, df=37, p<.001; informational,
1 r=.63, df=37, p<.01; functional,
1 r=.54, df=37, p<.01).
Table 1

<table>
<thead>
<tr>
<th>Scale</th>
<th>Posttraining</th>
<th>Six-month follow-up</th>
<th>12-month follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Training only</td>
<td>Training plus support</td>
<td>Training only</td>
</tr>
<tr>
<td>AIPS1</td>
<td>1.41</td>
<td>1.80</td>
<td>1.39</td>
</tr>
<tr>
<td></td>
<td>1.28</td>
<td>1.21</td>
<td>1.29</td>
</tr>
<tr>
<td>Generate a solution2</td>
<td>1.10</td>
<td>1.12</td>
<td>1.11</td>
</tr>
<tr>
<td>Role play will solve the problem2</td>
<td>1.20</td>
<td>1.16</td>
<td>1.19</td>
</tr>
<tr>
<td>Paralinguistic elements2</td>
<td>1.22</td>
<td>1.19</td>
<td>1.18</td>
</tr>
<tr>
<td>Overall quality3</td>
<td>1.06</td>
<td>0.90</td>
<td>1.02</td>
</tr>
<tr>
<td>GAS4</td>
<td>48.32</td>
<td>40.58</td>
<td>47.21</td>
</tr>
</tbody>
</table>

1 Possible scores range from 0 to 1.5, with higher scores indicating greater skills.
2 Significant interaction between condition and time.

Outcomes

The data from each outcome measure were analyzed separately with a split-plot factorial analysis of covariance (ANCOVA) using the pretreatment scores as the covariate, treatment conditions as the between-subjects variable, training plus support, and test time as the within-subjects variable (post-training and at six-month and 12-month follow-ups). Each ANCOVA was conducted with programs from the SAS package.

Expanded BRPS. The results indicated that all participants' symptoms were rated at subclinical levels at all assessment points (average scores ranged from 1.62 to 2.7; a score of 3 or less is subclinical). Given this low level of symptoms, the ANCOVA main effects and the interaction between condition and test time were not significant.

CMTs. As with the BRPS, the ANCOVA main effects and the condition-test time interaction were not significant for any of the four CMTs. Analyses of the pre-post changes for each CMT (2×2 split-plot factorial ANCOVA) yielded the same pattern of results across the four; a significant main effect for time—lowest F=6.17, df=1, 75, p<.01—and insignificant effects for condition and the condition-time interaction. Participants significantly and substantially improved their knowledge and performance of the materials and skills presented in a module. Furthermore, they retained their knowledge and skills with no loss during the follow-up period.

AIPS. Unlike the interaction effects for the BRPS and the CMTs, the ANCOVA effects were significant for four of the six AIPS scales. Table 1 presents the adjusted posttraining and follow-up means for the AIPS scales. Analyses of the interactions with tests of simple main effects indicated that while both groups achieved the same adjusted posttraining means, the training plus-support group continued to improve during the follow-up period in participants' understanding of the nature of the problem (F=8.69, df=2, 75, p<.01), the adequacy of their generated solutions (F=6.62, df=2, 75, p<.01), the quality of the role play scores for solving the problem (F=4.04, df=2, 75, p<.02), and the overall quality of their role play.

In contrast, the training-only group declined on all AIPS scales so that participants were significantly poorer at the last follow-up in their understanding of the problem during their role plays (F=5.34, df=1, 75, p<.02), adequacy of their solutions (F=7.62, df=1, 75, p<.01), quality of the content (F=4.98, df=1, 75, p<.02), and overall performance (F=4.44, df=1, 75, p<.03).

GAS. The GAS results paralleled those for the AIPS (see Table 1). The ANCOVA interaction effect was significant, with the training-only group deteriorating slightly during follow-up compared with improvements in the training plus-support group. The differences between the groups were significant at the last follow-up (F=3.25, df=2, 90, p<.05).

Discussion and conclusions

The results demonstrate the feasibility and acceptability of enabling SUPPORT to reinforce skills training in persons with severe and persistent mental illness. All participants nominated someone who could serve as a supporter, and virtually all the nominees agreed to help. Because neither the history of the pairs' relationships nor the characteristics of the partners affected the frequency and consistency of the support, the procedures may apply to diverse participants, supporters, and living arrangements.

Furthermore, the meetings required a considerable amount of the supporters' time, which they willingly gave despite the absence of any tangible incentives. Perhaps the highly structured nature of the procedures encouraged supporters to complete them; supporters commented that they felt particularly comfortable completing tasks such as reviewing the rating sheets and checklists with the participants. These tasks required no interpretive judgments and could be finished within their time constraints.

Supporters' satisfactions with their role was associated with the frequency of meetings. This finding and the participants' perception of the relationships as one-sided giving by the SUPPORTERS.
supporters suggest the need to sup-
port the supporters. The declining
frequency of the meetings over the
five months may partly reflect a de-
cline in supporters’ enthusiasm, al-
though it may also reflect a streamlin-
ing of the meetings. By paying careful
attention to supporters’ attitudes and
providing ongoing support, their en-
thusiasm may be maintained.
It should be noted that participants’
perceptions of the type and amount of
support they received were not as-
associated with their satisfaction. Emo-
tional and informational support were
apparently satisfying as functional
support, which may be more difficult
to provide because it often requires
resources such as money and time.
The outcome measures provide
suggestive evidence of the efficacy of
the support procedures. The AIPSS
results are similar to findings that so-
cial support for persons with severe
and persistent mental illness is corre-
lated with enhanced coping respon-
ses when they are confronted with a
problem or stressful situation (12, 16).
The results are particularly en-
couraging because the improvements
correlated with the increase in the
weeks thereafter. The majority of par-
ticipants remained in close and fre-
quent contact with their supporters, and
the brief and informal exchanges provided
opportunities to practice interpersonal
skills and give informational and
temporal emotional support as
needed.
Participants’ subjective symptoms and their almost perfect retention of
the skills taught in the modules pre-
cipitated the evaluation of the effects of the
support on either outcome. The de-
sign and implementation of the proj-
et had several limitations that reduce
the generalizability of its results and
point to areas for future research.
The project was conducted as a
quasi-experimental design, and the
differences between participants in
the first half of the project (training only)
and the second half (training plus support) may have affected the
AIPSS results. This effect is unlikely,
however, since the two groups were
not significantly different on any
measure at participants’ enrollment,
and there were no changes in the pro-
cedures for referral to residential care
or the supply of residential care beds.
The meetings focused on the modules and ignored develop-
ment of the mutual interests that sus-
tain long-term relationships. Howev-
er, the meetings did not impede such development—they simply did not
directly address these interests.
The supporters need support. Ad-
ministrative support could be given by
making the procedures an expect-
ed and valued responsibility, which is
to similarly routinized and monitored by
the residence operators. Participants’
forme managers could give supporters
periodic emotional, informational, and
functional support. Supporters may have
be replaced periodically, given the
typical turnover of residential care
staff and the movement of indivi-
duals from residence to resi-
dence. Slightly more than 25 percent
of the supporters changed during the
five months of the procedures. The
effects of such changes could be
minimized if support were available from
several sources. Peers who are famil-
iliar with a residence could span the
change in staff supporters, and family
or case managers could span changes
in residence.

References
1. Houston MK, Schneider ME. Social skills
training with schizophrenia: a meta-analy-
ic evaluation. Journal of Consulting and
2. DiG MN; Bond GR. Meta-analytic evalu-
ation of skills training research for individu-
als with severe mental illness. Journal of
Consulting and Clinical Psychology 64:
1337-1345, 1996.
3. Holzerman RK, Liberman RP, Kopelowicz A:
Psychosocial skills training in schizophrenia:
Lessons from the absence. Schizophrenia
Bullites in press.
4. Perc DL, Mearse RT. Research update on
the psychosocial treatment of schizophre-
nia. American Journal of Psychiatry 155:
5. Scott JE, Dixon LB. Psychological inter-
ventions for schizophrenia. Schizophrenia
6. Depue D: Long-term support and social
support training for patients with schizophre-
nia. Psychiatric Services 47:1195-1196,
1996.
7. Luce AB. Combining telephone peer coun-
selling and professional services for clients
in intensive psychiatric rehabilitation.
8. Kopelowicz A, Wallace CJ, Zucker, B:
Teaching psychiatric inpatients to re-enter
the community: a brief method of improve-
ment of contact care. Psychiatric Services
40:1341-1346, 1996.
impact of assertiveness characteristics on func-
tional outcomes from community support
programs for persons with schizophrenia: a
growth curve analysis. Journal of Consult-
Rehabilitation services for persons with
schizophrenia. Psychiatric Services 49:297-
11. Cossell CM, Kujper L, Powers MJ. So-
cial networks and support in long-term psy-
chiatric patients. Psychiatric Medicine 25:
12. Holtman CM, Wessington M-M, Olman A:
Relationships between social support, so-
cial coping, and life events in the etiology of
schizophreniform patients. Scandinavian Jour-
13. MacDonald EM, Jackson JH, Hayes BL, et
al. Social skills as a determinant of social
network and perceived social support in
schizophrenia. Schizophrenia Research
14. Anthony WA, Liberman RP. The practice
of psychiatric rehabilitation: historical, con-
ceptual, and research issues. Schizophrenia
15. Gottsel B, Cogdell AE. Using social
network therapy to create support systems
for the chronically mentally ill. Canadian
Journal of Community Mental Health 6:131-
16. Stewec D, Fleumby RB. Schizophrenia, psy-
chiatric rehabilitation, and healthy de-
velopment: a theoretical framework. Psy-
17. Liberman RP, Weiss CJ, Rindskopf P, et
al. Training in social interdependence skills
applications and impact in chronic schizophre-
nia. In What schizophrenia is in 2007.
Edited by Gotzsche J, Legensen, P, Molland E.
Amsterdam, Mert & Zelger, 1982.
18. Doussolle CP, Carter MJ, Bloom WD, et
al. Assessment of interpersonal problem-solv-
Training in quality of life. In: The brief
schizophrenia rating scale: ‘the drift
human’. International Journal of Methods in
Global Assessment Scale: a procedure for
measuring overall severity of psychiatric
symptoms. Archives of General Psychiatry