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Health Educ Behav 1991; 18; 477

DOI: 10.1177/109019819101800406

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Enhancing Social Support at the Workplace: Assessing the Effects of the Caregiver Support Program

Catherine A. Heaney, PhD, MPH

Although the health-enhancing effects of social support have been well documented, little is known about how to increase the flow of social support among network members. This article describes and evaluates the Caregiver Support Program, a worksite program that attempts to improve the quality of work relationships among house managers and direct care staff who work in group homes for the developmentally disabled. The program incorporates three strategies for increasing social support: (1) adding a new person or group of persons to the employee's social network, (2) enhancing existing relationships by improving the focal employee's skills for maintaining strong networks and mobilizing support, and (3) enhancing existing relationships by training members of the employee's social network in ways to be more supportive. The Caregiver Support Program was evaluated in a randomized field trial. Results indicate that the program was effective in improving the relationships between direct care staff participants and their house managers. However, other work relationships remained unaffected. The relationship between direct care staff and their house managers was the only work relationship for which *both* members of the interpersonal dyad participated in the program. The implications of these findings for health education practice and future research are discussed.

INTRODUCTION

The beneficial effects of social support on health are well documented. Social support has been associated with longer life, psychological well-being, compliance with health regimens, decreased morbidity, and recovery from serious physical illness and injury.¹ In addition, social support has been shown to buffer

This research was supported by NIMH grant 5P50MH38330 from the Center for Prevention Research to the Michigan Prevention Research Center. The author expresses great appreciation to Dr. Richard Price and Dr. Robert Caplan for their invaluable contributions. Also, the author gratefully acknowledges the helpful comments of Dr. Barbara Israel and Dr. Michelle VanRyn on an earlier version of this article

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Health Education Quarterly, Vol. 18(4): 477-494 (Winter 1991)

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against the adverse consequences of stress.² People who are experiencing a stressful life event or life transition can be protected from deleterious effects on their health by high levels of social support. Although neither the psychological nor the physiological mechanisms through which social support has its beneficial effects on health are well understood, a low level of social support has been firmly established as a risk factor for poor mental and physical health.³ The Health Promotion Unit of the World Health Organization has made the strengthening of social networks and social supports a priority area for intervention, stating that social ties are important “determinants of values and behavior relevant to health” and “significant resources for coping with stress and maintaining health.”⁴

At the workplace, the provision and receipt of social support has been highly recommended as a means of protecting employees from the deleterious effects of exposure to unavoidable or unmodifiable worksite stressors.⁵ Social support can be conceptualized as a resource that people call upon when coping with stress.⁶ Increasing the amount of social support available to employees may facilitate effective coping behavior in three ways. First, social support can help an employee modify a stressful situation, i.e., deal with the problem being faced. For example, coworkers and supervisors can assist in accomplishing a task, provide guidance and advice, and provide access to diverse information and new contacts. Thus, employees are no longer constrained by the limits of their own abilities and personal resources when solving problems or dealing with difficult situations at work. Second, social support can help an employee develop a new perspective on a stressful situation. According to the theory of symbolic interactionism, people ascribe meaning to events and develop their own self-evaluations through their social interactions.⁷ Organizational expectations are communicated to a worker by others in the organization. Thus, coworkers and supervisors can help in defining role expectations and can temper the seriousness or threat of certain organizational demands.⁸ Third, the provision of social support may decrease the emotional upset associated with a problematic situation. Others at work can provide affirmation and emotional support such as empathy and understanding.

As evidence for the beneficial effects of social support has mounted, so has the enthusiasm for developing interventions that attempt to increase the amount and quality of social support that people receive. However, little is known about how to increase social support in order to provide long-term enhancement of health and buffers for chronic stresses. This lack of understanding has constrained the development of effective social support preventive interventions.^{1,9} Several attempts to incorporate support components into health education programs have been ineffective.¹⁰⁻¹² The careful development and evaluation of theory-based interventions can build the knowledge base about how social support works and improve the effectiveness of social support interventions.

This article will review various worksite social support intervention strategies and then describe how these strategies were incorporated into a theory-based social support intervention, the Caregiver Support Program (CSP). The CSP is an intervention for human service workers aimed at increasing exchanges of social support and decreasing negative social interaction. The results of a field experiment to evaluate the effectiveness of the CSP will be presented and discussed.

Intervention Strategies in the Workplace

Social support can be defined as interpersonal exchanges of affect, affirmation, and aid.¹³ These exchanges of support are made through a web of social relationships, called a “social network.” For the purposes of this article, social networks are considered to be person-centered or egocentric. Members of an egocentric network are defined as those people who have social interactions with one focal individual. For example, an employee’s coworkers, supervisor, friends, family, and other acquaintances constitute his or her social network. In order to enhance social support, both the *existence* and the *quality* of social ties need to be taken into consideration.¹⁴

There are several possible strategies for increasing the social support available to an employee. These include: (1) adding a new person or group of persons to the employee’s social network, (2) enhancing existing relationships by improving the focal employee’s skills for maintaining strong social networks and mobilizing support, and (3) enhancing existing relationships by training members of the employee’s social network in ways to be more supportive.

The first strategy of adding people to the network has been operationalized in various ways. Usually, the added potential supporter has had life experiences similar to those of the person seeking support. Support groups, which introduce a group of additional potential supporters for each participant, have been implemented widely, particularly with populations that are undergoing a life transition or attempting a behavior change. These groups are meant to supplement or perhaps substitute for existing social ties, and thus are particularly useful for people who are experiencing events that entail major disruptions in their social relationships.¹⁵

However, support groups have not been extensively implemented in the workplace, and those that have been implemented have not been particularly successful.^{16,17} Support groups necessitate an ongoing time commitment. Employers must allow their employees to participate during work hours or employees must be willing to meet to discuss work-related issues during nonwork time. Busy employees may be constrained in their participation by a lack of adequate time and energy. Also, the trust in confidentiality that is of paramount importance for a well-functioning support group⁹ may be compromised if other employees from the same company are also members of the group.

The second strategy, enhancing existing relationships by providing training to the focal individuals, has the distinct advantage of developing new competencies in the focal individuals. They gain the knowledge and the skills necessary for maintaining and mobilizing supportive relationships. Thus, the effects of the intervention can be maintained over time, even if there are major changes in the people comprising one’s work relationships. This has been a preferred strategy for interventions in the human services, where the turnover rate can be quite high.^{18,19}

When this type of training is the sole strategy used for enhancing social support in the workplace, the intervention runs the risk of being “victim-blaming.”²⁰ The onus of responsibility for maintaining and properly mobilizing supportive relationships lies with the focal employee. Coworkers or supervisors may not be receptive to or cooperate with the focal employee’s attempts to modify their interpersonal interactions. Thus, rather than being empowered by the acquisition

of new knowledge and skills, employees may suffer frustration and decrements in self-efficacy because they expect to be able to have some influence on relationships and situations that are not under their control.

The third option for support interventions, enhancing existing relationships through the training of significant network members, enjoys the advantage of building on existing strengths in the network. Network members, with whom the focal individual already has well-established relationships, may want to be more supportive, but lack the necessary knowledge and skills. The potential of this strategy for the workplace is further enhanced if the training program focuses on people who are central figures in the networks of many employees. These central figures are often firstline supervisors.²¹

Unfortunately, it has been easier to identify *who* should be trained than to ascertain *what* the content of the training should be. Behaviors that will be perceived as supportive have not been adequately identified. The helping behaviors of network members in nonwork contexts have been richly described,²² but they may not translate well into a work environment. Worksite norms and role expectations constrain behavior and may deem particular help-seeking and help-giving behaviors inappropriate. Training programs have attempted to create "supportive supervisors" through building skills such as empathic listening and providing constructive feedback.²⁴ The focus on these behaviors stems from research on the effective provision of support by professional counsellors to their clients. These behaviors may be less appropriate and less effective when used by lay helpers such as coworkers or supervisors.^{23,24} The expectations of the support recipient may be violated if a coworker begins to enact professional counselling behaviors. Also, unlike most professional counsellors, supervisors have the power to reward and punish their subordinates. A probing, reflective style on the part of a supervisor may cause concern for subordinates because they cannot discern if the supervisor approves or disapproves of their thoughts and actions.

Another drawback to the intervention strategy of training network members is that potential supporters may not know when support is needed unless the distressed employee makes some indication or attempts to mobilize support. Employee coping behavior provides interpersonal cues regarding what is wanted or needed in a stressful situation.²⁷ Supervisors and other potential supporters respond accordingly. If a program focuses only on the supporter, employees do not become more proficient at indicating that support is needed. In this case, even the most highly skilled supporter may not provide the desired support.

The Caregiver Support Program

The CSP targeted employees in group homes for the developmentally disabled and the mentally ill. These employees included direct care staff and house managers. Direct care staff, as their title indicates, provide much of the care for the clients in the group homes. Their job responsibilities include helping clients with activities of daily living, carrying out behavioral programming, and accompanying clients on community experiences. House managers are the immediate supervisors for the direct care staff. They sometimes provide direct care to

clients, but the majority of their time is spent in administrative and supervisory capacities. They are often responsible for ensuring that fiscal and regulatory policies are enforced. House managers are supervised by agency directors who are usually based outside of the group home.

Numerous sources of stress in the human service arena have been identified (e.g., emotional demands posed by clients, inadequate pay, excessive workload) and linked to adverse effects on employee well-being.²⁸⁻³⁰ In order to assess the stressors experienced by caregivers in our target population, semistructured interviews were conducted with employees at all levels of the community residential care system. Interviewees were asked about the stressors and the rewards of their jobs. The interviews suggested that caregivers, in general, experience high stress levels and that a large portion of their stress stems from nonsupportive and uncooperative relations among the various professionals in the mental health system and among the employees in the group homes. Thus, caregivers constitute a population that seems to suffer a dearth of social support and is at risk for stress-related problems.

A social support intervention could help caregivers in two ways. First, social support may buffer caregivers from the effects of nonmodifiable occupational stressors. For example, one employee stated that the advice and encouragement of coworkers is what enabled her to deal with a client having an epileptic seizure in a public place. Second, since caregivers reported poor working relationships as a major source of stress, improving the quality of work relationships may reduce the overall stress level of caregivers.

The quality of work relationships is determined by both the presence of supportive interactions and the absence of negative or undermining interactions.^{31,32} Previous work has shown that undermining aspects of relationships are somewhat independent of positive or supportive functions, and that the absence of undermining may be just as critical to well-being as the exchange of social support.³³ The needs assessment interviews indicated that caregivers experienced both undermining (in the form of back-biting gossip, unconstructive criticism, and conflict) and a lack of support. Some caregivers also reported experiencing social isolation on the job.

Thus, the objectives of the Caregiver Support Program that pertain to the quality of work relationships* included the following:

- (1) To increase the frequency of social interaction between caregivers,
- (2) To increase the amount of social support exchanged between caregivers, and
- (3) To reduce social undermining among caregivers.

In order to optimize the effectiveness of the program, all three types of social support intervention strategies described in the previous section were incorporated into the CSP. First, the development of new network ties was facilitated by implementing the program in groups of approximately 20 people. The groups were composed of house managers and direct care staff from 10 different homes.

*The Caregiver Support Program had other objectives, unrelated to the quality of work relationships, but they will not be discussed in this study.

The group format allowed for the sharing of both difficult and successful work-related experiences among participants. In this way, participants could benefit from the social comparison and joint problem-solving processes that characterize a successful support group. In addition, being exposed to the perspectives of others on similar work situations allowed for affirmation or reappraisal of an employee's own job stresses and coping strategies.

Sessions were structured so that constructive interaction among group members was maximized. For example, each session started with an icebreaker and an update, during which participants were invited to share any notable events or achievements that had occurred in their group homes since the last session. Also, each session (except the first) allowed time for participants to report on their efforts to use newly learned skills and to receive feedback from group members and trainers on their efforts. These activities allowed group members to get to know one another and to exchange both emotional and instrumental support, as well as subtly underscoring how caregivers can be important providers of support to each other.

Second, Caregiver Support Program participants took part in training activities focused on enhancing and making fuller use of existing relationships. Participants were encouraged to explore how social support from others might help solve problems and reduce distress at work. They brainstormed specific ways that others might aid in dealing with particular, common job stressors. For example, participants stated that receiving thanks from other staff and having staff reciprocate favors would ease the distress associated with having to work an extra shift at the last minute.

After expanding their comprehension of social support and its helping potential, participants mapped their own social networks and then diagnosed the strengths and weaknesses of their networks. For example, they explored issues of network membership, the kinds of support provided by network members, and who provided what kind of support. Participants evaluated their own networks on these dimensions and developed recommendations for changes in their networks. After these network diagnostics were completed, participants worked on refining the interpersonal skills necessary for exchanging social support with others. These skills included clarifying misunderstandings, providing constructive feedback, and asking for help from others effectively. This latter skill was included because caregivers are known to feel uncomfortable in seeking aid for themselves,²⁸ and beliefs about the benefits of help-seeking are associated with increased support mobilization, independent of the number of potential supporters available.³⁴ Although the skill areas were chosen during the program development process, the actual strategies for improvement were generated by the participants themselves in relation to problems they had experienced. As mentioned previously, well-validated prescriptions for effective methods of providing support in a work context do not exist. Thus, participants were *not* instructed how to behave; instead, with the guidance of the trainers, they gleaned suggestions for change from the stories of others' effective, supportive social interactions.

The third intervention strategy of training key network members in ways to be more supportive was also implemented. In the workplace, supervisors are important potential providers of support. House managers are the immediate supervisors for direct care staff. Thus, direct care staff participants not only

learned new skills themselves, but could benefit from the increased skill of their supervisors. The supervisors of the house managers did not attend the training. Thus, the strategy of improving the support-giving of important network members was in effect only for the direct care staff, not the house managers.

Due to the exigencies of round-the-clock staffing of group homes, it was logistically impossible to have all of the staff from a group home attend the CSP. Instead, the house manager and one direct care staff person from each group home were invited to attend. The house manager and direct care staff person were expected not only to acquire new skills themselves, but also to train the other staff in the home on the CSP material. Thus, strategies for developing and running training activities were discussed and practiced during the CSP sessions.

The social support objectives were addressed in three four-hour sessions held one week apart. Each of the sessions was facilitated by two co-trainers. Four trainers (two pairs of co-trainers) were hired on the basis of their expertise in facilitating groups and their familiarity with the caregiving profession. Trainers themselves underwent rigorous preparation for training the participants on the CSP. Group process techniques were reviewed and practiced, the theory of referent power³⁵ was introduced and implemented, the content of the CSP and its theoretical underpinnings were fully discussed, and the actual CSP sessions were rehearsed. Trainers were also made aware of the demands of a field experiment and instructed to be as consistent as possible in their delivery of the intervention across training groups.

The learning processes of the Caregiver Support Program were structured according to the postulates of social learning theory³⁶ and the work of Janis³⁷ on effective short-term counselling techniques. Social learning theory suggests that modeling and rehearsal of new behaviors are crucial aspects of the learning process. Trainers modeled new behaviors and then allowed participants to rehearse the behaviors in the relative safety of the training group. Only after developing a feeling of mastery would participants try out new behaviors at their workplaces. Positive reinforcement was given throughout the learning process in order to keep motivation and self-esteem high.

Janis³⁷ suggests that trainers are most effective in bringing about changes in attitudes and behaviors of participants if they are perceived as knowledgeable, likable, admirable, and accepting. In order to develop this image and gain referent power in the eyes of the participants, trainers provided unconditional positive regard for the participants, specific and contingent praise for behavior change efforts, and made moderate self-disclosures about their own attempts at behavior change.

In sum, the Caregiver Support Program represents a unique worksite social support intervention in that it attempted to introduce new network ties, train employees in social support concepts and skills so they could enrich their existing relationships, *and* train important network members in ways to be more supportive. In addition, the program avoided a pitfall common to social support training interventions; the CSP did not make a priori assumptions about what specific behaviors will increase perceived social support. Instead, participants identified effective social behaviors from the sharing of previous successful experiences. Lastly, the program used theory-informed learning processes and allowed for rehearsal and practice of new skills.

METHODS

Recruitment, Randomization, and Participation in Training

The Caregiver Support Program was evaluated in a randomized field experiment. The study included home managers and direct care staff in all eligible group homes in 11 counties of Michigan. Only small group homes were eligible, i.e., homes serving from six to 12 developmentally disabled or mentally ill clients. A multistage recruitment procedure was used. First, directors of agencies that operated two or more group homes were invited to an orientation session during which project objectives were described and permission to recruit eligible group homes was sought. Fifty-five of the 73 agencies (75%) agreed to participate. Once the agency had agreed, the eligible group homes within each agency were randomly assigned to control or treatment. Second, home managers of each of the group homes were contacted regarding their willingness to participate in the study. Ninety-nine percent of the homes agreed to participate. Next, home managers from group homes assigned to the treatment group were invited to attend an orientation session during which they were given an overview of the program and encouraged to participate with their staff.

Eleven training groups were formed, each of which provided training to the home manager and a direct care staff person from eight to 12 homes. Of the 157 homes that were assigned to the treatment group, 44 of them did not have any staff show up at CSP sessions. Thus, 72% of the homes had at least one person attend one or more sessions of the program. Of those who did attend, two-thirds of the direct care staff and three-quarters of the home managers attended all three sessions.

Data Collection Procedures and Sample Description

Survey data was collected from employees in group homes assigned to both treatment and control groups. Data was collected one month before the beginning of the CSP and then five weeks after the program's culmination. Self-administered questionnaires were mailed to each staff member at the group home in which they worked. Five dollars were included with each questionnaire to reimburse employees for their time in filling it out. A stamped, addressed envelope was provided for the return of the survey. Reminder phone calls were made to every employee who had not returned the survey within three weeks of receiving it.

Data was also collected from observers of and participants in the training sessions for process evaluation purposes. Trained observers attended many of the CSP sessions and noted if the activities described in the session's protocol were completed as planned. Observers were also asked to rate the quality of the group process and the extent to which each session met its goals. At the sessions, participants filled out questionnaires that asked about their perceptions of the learning process and its relevance to their worklives.

Only employees who responded to the survey at both data collection points and who could be clearly categorized as a home manager or direct care staff are

included in these analyses ($N_{\text{House Manager}} = 138$, $N_{\text{Direct Care}} = 990$). The response rate for the pretest survey was 77%. Of the employees who responded to the first survey, 62% responded to the second. The attrition is due to both nonresponse and turnover. This occupational group has a very high turnover rate, and many of the employees who responded to the pretest survey were no longer similarly employed at the time of the second survey. Response rates in the experimental and control groups did not significantly differ.

The sample is predominantly female (82%), young (71% under the age of 35), and white (81%). Sixteen percent of the sample is black, with Asians and other minorities composing the remaining 3%. Approximately 40% of the employees were currently married, 41% had never married, and the other 19% were either separated, divorced, or widowed. The average family income was approximately \$15,000 per year. Over 20% of the sample reported incomes of less than \$10,000 per year. Having a high school diploma is a statewide requirement for work in these homes. Thus, 97% of the sample reported graduating from high school, with 56% having received further training or education.

Measures

Definition of CSP Participant

Any employee who attended at least one of the three CSP sessions that dealt with improving social relationships is considered a participant in the training.

Process Measures

Participants' perceptions of the CSP trainers, the other members of their training groups, and the sessions themselves were ascertained through a questionnaire. The *social attractiveness* of both the trainers and the group participants was measured through a semantic differential on factors of warmth, support, being likeable, sincere, and accepting. *Helpfulness in acquiring skills* is a summary index of four items that tapped helpfulness for learning how to clarify misunderstandings, make requests of others, provide feedback, and train others. *Usefulness of the sessions* is an index of how useful participants perceived each of the three sessions to be.

Outcome Measures

Following the objectives of the CSP described earlier, outcomes of interest include employee frequency of contact with other employees in their group home, social support, and social undermining. All multi-item indices were created based on the results of factor analyses and have acceptable internal consistency reliabilities. Table 1 presents the number of items, reliability coefficients (Cronbach alphas), means, and standard deviations for the multi-item indices at Time 1. A description of the constituent items of the indices follows.

Table 1. Multi-Item Indices: Number of Items, Cronbachs Alphas, Means, and Standard Deviations

Index	Number of Items ^a	Alpha	Mean	SD
Supervisor support	5	.89	3.25	1.04
Supervisor undermining	2	.85	1.58	.88
Coworker support	5	.87	3.16	.95
Coworker undermining	2	.84	1.62	.81
Praise and feedback ^b	2	.72	3.64	1.41
Frequency of contacts ^c	2	.61	4.52	1.02

^a All measures, except where specified, are measured on five-point response scales: 1 = none at all, 2 = a little, 3 = some, 4 = quite a bit, and 5 = a great deal.

^b Measured with a seven-point response scale ranging from never to almost always.

^c Measured with a six-point response scale ranging from never to more than once a day.

Frequency of contact with other employees in the group home was measured with two items that asked how often the employee met with or talked with the immediate supervisor and with coworkers respectively during the last four weeks.

The social support literature suggests that it is important to discriminate between sources of social support and between types of support.^{5,22} Factor analyses of our data showed separate factors for support from coworkers and from supervisors. However, types of support (emotional, instrumental, appraisal) were empirically highly associated and not separable. Thus, measures for *supervisor support* and *coworker support* were developed. Each of these measures is a five-item index tapping how much useful information, care and concern, help in thinking through a problem, help in getting needed materials and services, and praise and appreciation were received from each of the sources.

Two questionnaire items asked about the amount of praise and constructive feedback that had been received at work within the last four weeks. No referent source was mentioned. These two items combine to form an overall measure of *praise and feedback* received by an employee.

Our factor analyses supported the creation of separate measures of the undermining aspects of relationships. Thus, measures of *supervisor undermining* and *coworker undermining* have been included. Each is an index of two items that tap the amount of undercutting of one's efforts and unconstructive criticism that have been received during the last four weeks.

Analysis Procedures

Because the CSP may be differentially effective for house managers and direct care staff, all analyses have been done separately for these two groups. First, the posttest means on the outcome variables for the treatment and control groups will be compared using standard t-test methods. These traditional experimental-control contrasts produce a conservative estimate of the effect of participating in the intervention because the randomized treatment group includes house managers and direct care staff who had no exposure to the training sessions. Of

the 78 house managers assigned to the treatment group, 20 did not show up for training. Among the 520 direct care employees in the treatment group, only one-tenth of them ($N = 52$) had direct exposure to the CSP. This was because only one direct care employee from each group home was invited to attend. Thus, further analysis is required to discern the actual effect of participating in the training sessions.

This is not a unique data analysis problem. Most health education field trials suffer from the problem of no-shows. Often, evaluators will opt to compare those who participated in the training (excluding nonparticipants or no-shows) to all members of the control group. This procedure undermines the effects of randomization and casts doubt on the internal validity of the results. A procedure developed by Bloom³⁹ allows for comparisons to be drawn between treatment group participants and those members of the control group who would have participated if they had been invited to do so (would-be participants). Stated somewhat differently, this procedure drops from the analysis both the no-shows *and* those employees in the control group who would likely have been no-shows if they had been randomized into the treatment group. Thus, this procedure assesses the effect of participation in the intervention among those caregivers who are likely to attend the training sessions if invited to do so.

Instead of trying to identify which caregivers in the control group would have participated if given the choice, Bloom's procedure utilizes estimates of the *means* of the outcome variables for this subset of the control group. Because the nonparticipants in the treatment group are assumed to be similar to employees in the control group who would not participate even if invited to do so, the mean of the former group (which can be calculated from the data) is used as the estimated mean for the latter group. This estimated mean is subtracted from the total mean of the control group to produce an estimate of the mean for members of the control group who would have participated. This estimated mean can then be compared with that of the employees in the treatment group who participated in the training.*

RESULTS

Process Evaluation

The systematic reports of those who observed the training sessions indicated that there is very little variation in the delivery of the program across training groups. Observer ratings of the quality of the sessions also indicated no significant variation across training groups nor between pairs of trainers. In other words, the training was implemented consistently to all participants.

*To test the statistical significance of the difference between the means, Bloom offered a procedure that results in exceedingly conservative tests. As an alternative, Vinokur et al.⁴⁰ suggested a revised procedure for calculating the t-test statistic. The variance for the control group of would-be participants is estimated as the largest of the known variances of the actual participant group, the treatment group nonparticipants, and the total control group. The number of would-be participants in the control group is estimated by multiplying the number of cases in the control group by the proportion of participants in the treatment group. Further details are available from the author.

The participants' perceptions of the trainers, the other group participants, and the training sessions in general are presented in Table 2. The means of these measures are uniformly high and suggest that the trainers were successful in establishing themselves as likable and helpful and in maintaining that status throughout the sessions. The trainers also successfully facilitated the group process, such that participants aided each other in the learning process. Overall, the content of the program was perceived as very useful.

Participants' responses also suggest that many of them engaged in therapeutic social comparison processes during the sessions. Many participants commented on the usefulness of hearing about the experiences of caregivers from other group homes. For example, when asked what was most useful to them about the program, one participant stated that it was "reinforcing to know that I'm not the only one having these problems." Another participant echoed these sentiments, "Knowing that everyone has problems similar to mine has been really comforting." The CSP seems to have been successful in creating a context for building rapport and exchanging support among group members.

As indicated earlier, participants were expected to transfer new concepts and skills to the rest of the staff in the group homes by implementing training activities in the home. By the end of the program, less than half of the participants had carried out training activities in their group homes on clarifying misunderstandings (29%), providing effective feedback (46%), and making requests of others (42%). Approximately one-third of the participants had not conducted any CSP training activities in their group homes. Thus, overt transfer of the intervention to those direct care staff in treatment homes who did not attend the CSP sessions was only partially successful. However, over 90% of the participants stated that they used newly acquired interpersonal skills back at the group home. Therefore, some indirect transfer of the program's objectives could have occurred through role modeling.

Effectiveness of Randomization

There were no significant differences at pretest between the treatment and control groups on this sample. Demographic variables and all social relationships and social skills variables were tested for differences.

Table 2. Process Checks on the Integrity of the Intervention

Process Measures ^a	Mean	SD	N
Trainers			
Social attractiveness	4.37	.48	184
Helpfulness in acquiring skills	4.16	.64	150
Group Participants			
Social attractiveness	4.15	.58	184
Helpfulness in acquiring skills	3.78	.71	150
Usefulness of the sessions on networks and building interpersonal skills			
	4.16	.67	144

^a All process measures are measured with five-point response scales.

Effects of the Intervention

Direct Care Staff

Table 3 presents the results of the field experiment for both direct care staff and house managers. Effects for both membership in the treatment group and for participation in the program are shown. Looking at the full randomized experimental design, there are several weak but significant effects. Direct care staff in the treatment homes reported higher levels of supervisor support. They also experienced higher levels of praise and feedback than those in control homes. Lastly, they reported having more frequent contact with others who worked in the home.

The comparisons between direct care staff who participated in the CSP and control group would-be participants show much stronger results. All of the comparisons that were significantly different in the full experimental design remain so. In addition, direct care participants reported their supervisors to be less undermining than their control group counterparts reported theirs to be. Coworker relationships of direct care staff were not affected by the CSP. To sum, the CSP was effective in increasing the number and improving the quality of social interactions at work for direct care staff.

Table 3. Effects and t-tests for Comparisons between the Full Experimental and Control Groups and between the Participants and the Control Group Would-be Participants

Outcome Variable	Effect of Being in the Treatment Group ^a		Effect of Participating in the CSP ^b	
	Effect	t	Effect	t
Direct care staff				
Supervisor support	.15	2.16 ^c	1.58	7.05 ^d
Supervisor undermining	-.10	-1.81	-1.03	6.56 ^d
Coworker support	.02	.43	.27	1.39
Coworker undermining	-.02	-.34	-.21	1.29
Praise and feedback	.22	2.53 ^c	2.26	7.24 ^d
Frequency of contacts	.14	1.96 ^c	1.42	6.20 ^d
House managers				
Supervisor support	-.16	-.98	-.22	1.22
Supervisor undermining	.19	1.78	.26	1.82
Coworker support	.18	1.06	.25	1.22
Coworker undermining	.06	.82	.08	.91
Praise and feedback	-.02	.10	-.05	.20
Frequency of contacts	-.03	.29	-.05	.39

^a Effect of being in treatment group = treatment group mean minus control group mean.

^b Effect of participation = mean of treatment participants minus mean of control group would be participants.

^c $p < .05$.

^d $p < .01$.

House Managers

In contrast to the findings for direct care staff, house managers did not benefit from the CSP. Their relationships with both supervisors and coworkers remained unaffected and they reported no increase in received praise or feedback. The frequency of their contacts with others remained unchanged. There were no significant effects for the full experimental group of house managers nor for house managers who actually participated.

DISCUSSION

The Caregiver Support Program was a short-term intervention aimed at facilitating the creation of new, supportive network ties and enhancing existing work relationships by making them more supportive and less undermining. The process evaluation suggests that many of the participants, regardless of whether they were house managers or direct care staff, regarded the other training group participants and the trainers as supportive and helpful. Many expressed the intent to continue to have contact with other training group members. Thus, the sessions successfully introduced new supporters, for both the short-term and possibly the long-term. The outcome evaluation, on the other hand, suggests that existing work relationships were enhanced only for direct care staff.

The fact that direct care staff were aided by the program but house managers were not suggests that it may be important to include both the giver and receiver of support in training activities. For home managers, neither their supervisors nor their work peers were included in the training. They had the sole responsibility for enhancing the nature of these relationships. However, the direct care staff enjoyed the added advantage of having their supervisors participate. Indeed, it is the supervisory relationship that shows substantial improvement for direct care staff; their relationships with coworkers (who did not participate in the CSP training) remained unchanged. Thus, the inclusion of both members of an interpersonal dyad in a training component of a social support intervention may greatly enhance its effectiveness. Perhaps both improvements in help-seeking behavior on the part of the support recipient and help-giving behavior on the part of the support provider are necessary for the enhancement of work relationships.

Another possible explanation for the lack of program effects among house managers is that efforts to change individuals' work-related attitudes and behaviors may have little success unless the organizational environment reinforces them.⁵ This is very important in the area of social support. House managers, who attended the training sessions, were likely to support and reinforce efforts by their staff to try to improve interpersonal relationships. However, house managers may not have been rewarded for or encouraged in their own efforts by *their* supervisors. Provider agencies were encouraged by the project team to support the goals of the CSP, but were given no specific guidelines as to how to do that. The developers of the CSP assumed that the group homes were autonomous enough organizational units that an intervention that focused only on employees who worked within the home could be effective. This may have

been an adequate assumption for direct care staff, but not for house managers who interface with and report to people outside of the group home. This is a distinct limitation of the program in its current form, and underscores the importance of including personnel from all levels of an organization when trying to change employees' attitudes and behaviors

The evaluation of the Caregiver Support Program also raises other important issues. The CSP focused on diagnosing social networks, modifying beliefs and attitudes toward social support and help-seeking, and refining social skills. For the direct care staff, this combination of activities was effective. However, without a factorial evaluation design, the effects of individual components cannot be discerned. Is one of these components more effective or potent than the others? Or do the components interact synergistically to increase perceptions of support? Social learning theory suggests that modifications in expectations *and* skill levels are necessary when attempting to change behaviors. Thus, the effectiveness of the CSP is most likely dependent on the inclusion of all of its components. Nevertheless, further research is needed to empirically address these questions.

Another issue raised by the evaluation of the CSP is the extent to which changes in perceptions of support are dependent on real changes on the behaviors of the providers and receivers of support. Clearly, direct care staff in the treatment group, and particularly those who participated in the training, perceived their supervisors to be more supportive and less undermining than their control group counterparts perceived theirs to be. Paradoxically, treatment group house managers did not report greater improvements in their social skills than control group house managers did. Do the reports of the direct care staff reflect real behavior change in their supervisors or do they perhaps indicate an increased awareness or sensitization to supervisor support issues? Each CSP participant was exposed to the problems and difficulties of all other participants in terms of giving and receiving support. Thus, they may have developed a deeper understanding of the problems faced by their house managers and consequently, viewed their house managers' behaviors in a more positive light. The research design did not include objective behavioral measures of the provision nor the receipt of support. The incorporation of observational measures in future research would help resolve this important research issue. However, it should be noted that increases in *perceived* support are important in and of themselves, whether or not there is behavior change on the part of supporters, because *perceived* support has been shown to enhance health and buffer stress.

Limitations of the Study

A number of factors may limit the external validity of this study. There is substantial attrition from the sample, due to both nonresponse and job turnover. The extent of the bias introduced by this attrition is unknown; caregivers who left their jobs during the study were not followed up. There is also a considerable rate of nonparticipation in the training program. Our follow-up interviews with house managers who were no-shows indicated that three major factors contributed to lack of attendance: difficulties in the staffing of the group home, crises

in the group home, and feelings that the CSP would not be useful. Logistical aspects of the program may need to be revised and alternative recruitment strategies explored in order to increase participation rates in the program. Lastly, the direct care participants were not chosen at random. House managers, following the project's general guidelines, used their own criteria to select a staff member to participate. These chosen participants may differ from other direct care staff in ways such that the CSP would be more effective for them.

Implications for Health Education Practice

Reports of educational interventions that effectively enhance existing work relationships are rare. Thus, the evaluation of the CSP provides important instruction for the development of future worksite social support interventions. Although the success of the program was limited, the results illustrate that it is indeed possible to have a positive impact on existing work relationships. The combination of a group format, training activities focused on both modifying attitudes toward social support and refining social skills, and the inclusion of both the recipient and the provider of support in the training sessions resulted in improved work relationships. The CSP intervention is delivered in three four-hour sessions and requires little special equipment, thus making it logistically feasible to implement in most worksites.

The negative findings of the evaluation are also instructive to practitioners. The lack of significant effects on the coworker relationships of the direct care staff and on all of the house managers' relationships indicates that the effects of the program do not generalize to relationships with people who did not attend the training. Thus, the practitioner must either identify the most important work relationships for the target population and include the people involved in these relationships in the training sessions, or the practitioner must include all of the members of the employees' work networks in the sessions. The choice of strategy might depend on the type of worksite and the size of the employees' networks.

The lack of success of the "train the trainer" approach or the transfer of new competencies from CSP participants to other staff members in the group homes is also instructive. The burden of facilitating training activities in the group home may have been too onerous for caregivers who already felt overworked. The issue of transferring knowledge and skills is a difficult one,⁴¹ particularly in a work context where participation in training is severely constrained by the need for continuous care of clients. The CSP may not have provided enough instruction and practice for participants to develop skills in leading training activities and to feel confident in those skills. Practitioners may want to avoid reliance on the "train the trainer" strategy when developing programs for employees with little previous experience as trainers or group facilitators.

Lastly, a social support intervention should ensure the creation of a training context *and* a work context that explicitly supports and encourages the implementation of newly acquired behaviors and knowledge. The CSP was more successful in doing the former than the latter. The CSP did not explicitly incorporate a procedure through which organizational rewards (e.g., commendations, bonuses, promotions) would be awarded to participants who successfully

enhanced the work relationships in their group homes. Nor did the CSP encourage the provider agencies to make the goals of the CSP an important organizational priority or to set aside time and resources for supporting the CSP goals. Practitioners should not repeat these mistakes. Organizations could have been asked to discuss CSP goals at their regularly scheduled management meetings and to include supportive stories about the program in newsletters or memos. Exchanges of social support take place between people, but the people exist in a complex social environment. Thus, worksite social support interventions must incorporate an ecological approach to behavior change,⁴² and actively facilitate the creation of organizational norms and policies that inhibit undermining social interactions and reward the provision of social support.

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