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Job Seeking, Reemployment, and Mental Health: A Randomized Field Experiment in Coping With Job Loss

Robert D. Caplan, Amiram D. Vinokur,
Richard H. Price, and Michelle van Ryn
Institute for Social Research
University of Michigan

Cognitive theories of adherence to difficult courses of action and findings from previous survey research on coping with a major life event—job loss—were used to generate a preventive intervention, tested by a randomized field experiment. The aim was to prevent poor mental health and loss of motivation to seek reemployment among those who continued to be unemployed and to promote high-quality reemployment. Ss were 928 recently unemployed adults from southeastern Michigan, representing a broad range of demographic characteristics; they were randomly assigned to either the experimental or control condition. The experimental intervention included training in job seeking with a problem-solving process emphasizing inoculation against setbacks and positive social reinforcement. A pretest was administered, followed by posttests 1 and 4 months after the experiment. The experimental condition yielded higher quality reemployment in terms of earnings and job satisfaction, and higher motivation among those who continued to be unemployed.

Loss of a job is a major life event that affects nearly 10 million persons annually (Riegle, 1982). Studies indicate that job loss places these people at increased risk of poor mental health in terms of increased depression, anxiety, minor psychiatric morbidity, and decreased self-esteem and life satisfaction (e.g., Cobb & Kasl, 1977; Dooley & Catalano, 1980; Little, 1976; Vinokur, Caplan, & Williams, 1987; Warr, 1983), and causes other negative consequences. Longitudinal panel studies have documented these harmful effects and also indicate that reemployment improves well-being (e.g., Kessler, House, & Turner, 1987; Vinokur et al., 1987).

Despite leads about possible ways to reduce the negative impact of job loss (e.g., Latack & Dozier, 1986), experiments to help people cope with job loss and find new employment are few in number. Those experiments that have been conducted have yielded impressively high rates of reemployment. However, they have dealt primarily with special groups such as the handicapped (Azrin & Philip, 1979), persons at the start of their careers (Azrin, Flores, & Kaplan, 1975), and in times when the labor market provided more opportunities for reemployment, particularly in the production and industrial sectors, than is now the case (e.g., Kaufman, 1982).

The experiment described here pursues several new directions. It samples a broad cross-section of the unemployed. In addition to reemployment, it includes positive expectancies (Bandura, 1977) and mental health as key outcomes because of their prominence in research on coping. By focusing on mental health, it is possible to determine if a theory-guided intervention can prevent increases in depression and other negative affective states associated with inability to obtain reemployment.[1]

Conceptual and Theoretical Framework for the Preventive Intervention

The framework for the experimental intervention involves a process model in which social intervention influences motivation and skill, which, in turn, jointly determine job-seeking behavior. Motivation to engage in *continued* job seeking, according to this framework, is enhanced by prior success and undermined by setbacks. The decline of motivation caused by setbacks can be ameliorated by a process of attitudinal and behavioral inoculation. Such inoculation is also a target of social interventions. The framework suggests that all such social interventions, to be effective, proceed by establishing trust and providing continued social support.

Establishment of Trust and Other Initial Expectations

Research by Janis and his review of the clinical literature (Janis, 1982, 1983) indicates that it is necessary to establish

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Correspondence regarding this article should be addressed to Robert D. Caplan, who is now at Department of Psychology, George Washington University, Washington, DC 20052.

[1] There are two paths for accomplishing this goal: (a) reducing the causes of unemployment through macroeconomic and macrosocial change and (b) helping those who have lost jobs improve their coping, within realistic limits. This study addresses only the second path. That path will be of social interest even in times of maximally achievable employment because there will always be persons who are unemployed as they seek career transitions.

trust and referent power (French & Raven, 1959) between participants and trainers before introducing the other agenda of helping or counseling relationships. Such trust can be established by having the trainers and participants engage in moderate self-disclosure relating to the content of the helping relationship (Jourard, 1968). The trainers also need to establish at the outset that they have expert power (special training, personal experience with being unemployed) and expectations that the training procedure will be helpful for many people, if not for everyone (Meichenbaum, 1985). Consequently, we had the trainers disclose their own experiences with being unemployed and emphasize the value of persistence in the face of adversity. They also conveyed their expertise as specially trained persons and emphasized their expectation that many people would benefit from the job-seeking workshops.

Skill × Motivation

Once efforts to build trust and expert power are underway, research suggests that an intervention should aim to enhance job-seeking performance following the classic formula, Performance = Motivation × Skill. Attention to skills is critical because research shows that most people have little knowledge and skill regarding how to seek reemployment (Gordus, Jarley, & Ferman, 1981).

The intervention began by attempting to enhance components of motivation (e.g., Feather, 1982) necessary to engage in job seeking and in building the skills necessary for job seeking (e.g., identifying types of jobs where one's skills may be relevant, using social networks to obtain job leads, and presenting one's skills and abilities in a concrete and relevant manner in resumés and job interviews). Then, the intervention provided skill training itself.

Value expectancy theories of motivation and behavior (e.g., Ajzen & Fishbein, 1980; Feather, 1982) and appraisal-based theories of coping (e.g., Lazarus, 1966; Lazarus & Folkman, 1984) distinguish among several motivational components that are relevant to coping with job loss. One component is the primary appraisal of threat to a desired state (Dewey, 1933; Janis & Mann, 1977). If an unemployed person does not realize, for example, that the employer is searching for danger signals in the unemployed person's self-presentation (e.g., inappropriate dress, being late for the job interview, lack of eye contact), the potential occurrence of such danger signals will have no motivational properties. Accordingly, for each job-seeking skill taught in the intervention, the design involved an initial exercise that engaged the participants in identifying such threats and diagnosing the need to overcome them by acquiring the relevant skills. Such problem appraisal was designed to help the person conceptualize the nature of job seeking in transactional terms; namely, that there are factors that reside in the person (commitment, skills) as well as in the person's environment (availability of jobs and employers, job leads, social support) that determine outcomes (Janis, 1983; Lazarus & Launier, 1978; Meichenbaum, 1985).

A second motivational component is the cluster of expectancies regarding whether the person believes that he or she possesses the relevant job-seeking skills and can perform the necessary behavior (self-efficacy, self-esteem; Bandura, 1977), and that such performance will be instrumental in leading to desired outcomes. These perceptions of competency, called *secondary appraisals,* can be increased (a) through modeling processes, (b) by the teaching of skills in small steps to maximize success (e.g., Kanfer & Goldstein, 1984; Meichenbaum, 1985), and (c) by embedding newly attempted behaviors in a consistent program of reinforcement from the trainer (Janis, 1983). Accordingly, the intervention included both graded exposure to new skills and provision of positive verbal reinforcement from the trainer.

Inoculation Against Setbacks

Low self-esteem prior to job loss can form a significant barrier to engaging in job-seeking activity (Feather & O'Brien, 1986). An equally significant concern is the generalized sense of helplessness that can occur if unemployment, accompanied by successive failures to find a job, becomes prolonged (Wortman & Brehm, 1975). Laboratory experimentation suggests that as length of unemployment increases, there is increased urinary catecholamine reactivity to uncontrollable feedback, reduced persistence on tasks, and more concern with external causes than internal skills (Baum, Fleming, & Reddy, 1986). On the basis of these findings, the experimental intervention focused on long- as well as short-term motivation to engage in job-seeking behavior. Specifically, the study was designed to produce high motivation to engage in job seeking among those who continued to be unemployed as well as to promote reemployment.

Unlike prior research (Azrin & Beasalel, 1982; Azrin & Philip, 1979; Azrin et al., 1975), this study was designed to provide a limited period of intervention coupled with a set of procedures to psychologically inoculate the job seeker against setbacks. The conceptual framework for inoculation against setbacks (see Janis, 1983; Marlatt & Gordon, 1985; and Meichenbaum, 1985) consists of having clients (a) anticipate situations in which setbacks or relapses are likely, (b) generate alternative methods for overcoming the dysfunctional responses to setbacks, and (c) acquire skills needed to cope with setbacks.

Several experiments based on Marlatt and Gordon's or Meichenbaum's models suggest that one may not need continuous formal intervention to achieve effective coping with job loss, whereas others find no such effects. Variation in the types of population and in operational definitions of what constitutes *relapse prevention* may be at the heart of understanding when such effects are or are not found. (For a review of this literature, see Brownell, Marlatt, Lichtenstein, & Wilson, 1986.)

Social Support

The most common elements of social support refer to behaviors by others that are directed at enhancing a person's feelings of self-esteem, reducing negative affect, communicating belongingness, validating attitudes, and providing tangible aid (Kahn & Antonucci, 1981). Longitudinal survey research indicates that social support has multiple effects on the unemployed person. Vinokur and Caplan (1987) found that the attitudes and expectancies of the spouse regarding the value of job seeking predicted the attitudes and expectancies of the unemployed per-

son. Social influence can either support or undermine key components of job-seeking motivation. On the basis of this research, the intervention called for the trainer to endorse motivational components associated with job seeking and to provide opportunities for the other participants to provide mutual peer support.

A second effect of social support during job loss is palliative, influencing mental health (Atkinson, Liem, & Liem, 1986). Various studies indicate that job seekers who are highly motivated but fail in their job search appear at particularly high risk of poor mental health compared with those who are not so invested in the job search (Feather & Davenport, 1981; Vinokur & Caplan, 1987). This effect may be overridden by social support from a spouse (Vinokur & Caplan, 1987). Given that the intervention seeks to increase motivation to engage in job seeking, it could, accordingly, increase the risk of poor mental health among the highly motivated who fail to find reemployment. To address this risk, the experiment involved the presence of peers and the trainer who could provide support as participants recounted their stories of successes and setbacks, as well as including the component of inoculation against setbacks, mentioned earlier.

When the preceding elements were combined, they provided a framework for (a) the establishment of trust among the participants and the trainer, (b) perceiving the trainer as an expert, and (c) the development of expectations of success, elements assessed by measures of the participant's psychological engagement. These processes were expected to positively influence the job-seeking motivation and behavior of those who failed to regain employment and the quality of reemployment among those who did find a job, as well as the mental health of all job seekers.

Method

Subjects

Sites of recruitment. Recruitment took place at four state employment compensation offices in southeastern Michigan. Trained interviewers recruited 1,087 persons into the study. The interviewers screened out persons who were within 2 years of retirement, expected to be recalled to their previous job, showed any obvious signs of mental illness, or reported being unemployed for more than 4 months. The reason for the last criterion was that the study focused on *preventive* intervention and was not designed to deal with potential problems of learned helplessness among the long-term unemployed.

Characteristics of the sample. The sample was intended to represent a broad range of unemployed people but was not intended to be a random sample of the unemployed work force. For example, recruitment from the state employment offices defined the population as persons who were eligible for unemployment compensation or decided to apply for such compensation, or both. The obtained sample was similar in some ways to the U.S. unemployed population over 16 years of age (U.S. Bureau of Labor Statistics, 1986) and to representative community survey samples of unemployed (e.g., Kessler, Turner & House, 1988). Men constituted 46% of the sample, compared with 60% in the community survey and 56% in the U.S. population. Blacks constituted 15% in our study, compared with 20% in the community survey and 22% in the U.S. population. The average age was 35.9 years (SD = 10.6 years) and the average education was about 12.9 years (SD = 1.9 years). Similarly, the average age in the community survey was 35.0 years (SD = 10.5 years) and the average education was about 12.0 years (SD = 2.4 years), as it is in the U.S. population. Finally, 53% of our sample respondents included persons who were single at the time, that is, respondents who were divorced, separated, widowed, or never married.

Nearly one-third of the sample fell into each of the following three broad occupational classifications: (a) professional and managerial (32%), (b) service and clerical (38%), and (c) blue collar (30%). Using a 10-category code based on the Standard Industrial Classification Index (Office of Management and Budget, 1972), the most common occupation was clerical (30%). This group was followed by managers (16%), operators (13%), craft workers (11%), and professionals (10%), with the remaining 20% being miscellaneous.

The participants in this study were, on the average, well into their careers; respondents reported being with their previous employer an average of 6 years (SD = 6.3 years). Average length of unemployment was 13 weeks (SD = 9 weeks).

Method of recruitment. Respondents were approached while waiting in line and were briefly told about two programs that were being offered by the University of Michigan on how to seek jobs. One program was described as a 2-week series of morning sessions (the experimental condition); the other was described as a self-guided booklet program (the control condition). Persons were asked if they were interested in participating. Their responses were used to assign them to the conditions listed in Table 1.

Control and experimental groups. Among persons who said they were interested in participating, the interviewer asked whether they preferred the seminar or the self-administered booklet program. To ensure equal motivation to enter one or the other condition, only persons who expressed no preference were randomly assigned to the experimental and control conditions. Those who expressed a preference were sent job-search materials and eliminated from the sample. The majority of these persons preferred the self-administered program.

Dropouts and participants. Among those assigned to the experimental condition, 59% failed to show up for the intervention. This percentage varied only by about 5% over the course of recruiting 15 experimental groups in a 4-month period during which successively recruited groups were entered into the experimental and control conditions. Participants, by contrast, were defined as subjects who completed at least 6 of the 8 sessions.[2]

Timing of Data Collection

A self-administered pretest (T1) questionnaire was administered by mail about 2 weeks before the intervention began. The mailed materials included a $5 bill, as payment for completing the questionnaire, and a prepaid return envelope. Those who did not return the questionnaire received a letter and a telephone reminder urging them to complete the questionnaire and return it. A thank-you letter was sent to all those who returned the questionnaire. Posttests were, likewise, administered by mail along with similar payments. These posttests occurred at 4 weeks (T2) and 4 months (T3) after the intervention for each experimental group and its comparable control group.

There were eight sessions in the intervention (detailed later). Process measures of the intervention were collected from the participants at the end of Sessions 1, 7, and 8.

Response Rate

Table 1 presents the number of respondents and the response rates for the study. Of those experimental and control group respondents who

[2] Preliminary analyses showed that the basic findings of the study were not altered by omitting from the data the persons who completed only between 1 and 5 sessions (n = 73). This latter group was subsequently omitted to provide a clear operational distinction between exposure and nonexposure within the experimental group.

Table 1
Study Design

	Pretests		Posttests[a]			
	Jan.–June 1986		1.5 months		4 months	
	T1		T2		T3	
Respondent type	*n*	%	*n*	%	*n*	%
Control	322	87	281	88	214	67
Experimental	606	81	412	89	414	89
Participants	308	99	282	90	285	92
Dropouts[b]	298	68	130	86	129	85
Total	928	83	693	88	628	80

Note. For T2 and T3, $N = 937$.
[a] Fifty percent of the sample of 298 dropouts from T1 (i.e., 149) were randomly selected for follow-up at T2 and thereafter. At T2, for example, 130/149 dropout respondents represents a rate of 87%. The percentages are computed as (number received/number of questionnaires mailed at the wave) × 100.
[b] Based on the number of eligible participants and dropouts (see Footnote a).

received a pretest questionnaire, 83% mailed it back. The response rates for those receiving the T2 and T3 posttest questionnaires were 88% and 80%, respectively. These relatively high response rates for a mailed, self-administered questionnaire were attributed to the respondent payments, phone call follow-ups, and thank-you letters (Freedman, Thornton, & Camburn, 1980; Heberlein & Baumgartner, 1978). The experimental analyses were based on the subset of persons who had complete data at all three waves. The response rates varied little from subgroup to subgroup and, as indicated in Table 1, the rates were notably lower than those for the experimental group only at T3. This T3 variation, as described in the Results section, did not contribute to significant pretest treatment differences.

Treatment Conditions

The experimental condition consisted of eight 3-hour sessions distributed over 2 weeks, four mornings per week. All persons in the experimental condition were mailed an advance $5 incentive to cover transportation costs. Experimental participants were also told that they would receive a $20 payment for completing at least 6 of the 8 sessions and a certificate of participation. The certificate was awarded at the last session.

Each site was located in the geographical area in which recruitment to that site took place. The sites included meeting rooms at churches, public schools, libraries, community colleges, and union and city halls. The rooms were large enough to accommodate approximately 25 persons at movable chairs and tables. To facilitate discussion, a semicircular seating layout was used.

The design for the eight sessions was based on the principles described previously. They included the application of problem-solving and decision-making processes, inoculation against setbacks, receiving social support and positive regard from the trainers, and learning and practicing job-seeking skills. The intervention sessions were delivered to groups of 16–20 participants by male–female pairs of trainers. The trainers received approximately 80 hr of formal training, which included conceptual knowledge of group processes, the theoretical bases of the intervention, and extensive rehearsal. The trainers also practiced by conducting the eight-session sequence twice with pilot participants. Every 3 weeks, each trainer pair delivered a round of the training program to a new group. There were three pairs of trainers, and it took approximately 5.5 months to deliver the intervention to the 308 experimental participants who completed the pretest questionnaire.

Two procedures were used to maintain a high level of trainer adherence to the protocol over the 6 months during which the experiment took place. First, trainers were regularly observed by members of the research team. These observers followed a procedure worked out jointly with the trainers that allowed for constructive feedback after the end of each observed session. Second, the trainers met weekly with a staff person in charge of their training. The weekly meetings dealt with special skill-related topics facing the trainers.

The sessions covered a wide range of substantive, skill-related topics. The topics included examples and exercises in identifying and conveying one's job-related skills, using social networks to obtain job leads, contacting potential employers, preparing job applications and resumés, and going through a job interview. Each of the eight sessions was standardized for the trainers in 8–12 pages of documentation per 3-hr session.[3] The full details of the intervention are available from the authors.

The control condition consisted of a booklet briefly describing job-seeking tips, equivalent to 2.5 single-spaced pages of text. This booklet was mailed to persons after they were randomized into the control condition. The booklet contained useful information, but it was extremely brief in comparison to self-help paperback books available on job seeking.

Measures

In most cases, the major constructs assessed in the study consisted of multi-item indexes. Most of the resultant measures have coefficient alphas in the .70s and .80s. Samples of the content are presented later. The full questionnaires are available from the authors.

Intervention process. Assessments of the participant's immediate perception of the process within the intervention provided an indication of the intervention's integrity and strength (Yeaton & Sechrest, 1981). These assessments were based on a composite measure, Participant Psychological Engagement. The measure consisted of four multi-item indexes that covered the following aspects of the intervention: (1) trainer behavior (e.g., made the participant feel valued and good, presented information and skills clearly, and made the participant feel enthused); (2) social attractiveness of the trainers and the group (ratings on a semantic differential of warmth, support, being likable, accepting, and sincere; (3) social processes (e.g., freedom to participate, willingness of the group to listen to what one had to say); and (4) practice of job-seeking skills within the sessions. The component indexes had an average intercorrelation of .41, and the summary index of all the components combined had an alpha of .73. The summary index was used, rather than its components, because the single indexes produced overlapping patterns of results.

Social support. Two sets of variables dealing with social relations were considered to have potential nonexperimental influences on the outcomes. One set of variables was assessed by positive social support and by social undermining based on indexes developed by Abbey, Abramis, and Caplan (1985). The respective indexes included 8 and 5 items with coefficient alpha of .89 and .84, respectively. The other set assessed social assertiveness. It consisted of a 13-item index (alpha = .90) based on published instruments on social reticence and shyness

[3] Standardization refers to the order and method in which the content is presented and to the principles that the trainers follow in interacting with the participants. Within these standardized areas, the trainers varied their behavior as was appropriate to each interaction.

(Jones & Russell, 1982) and assertiveness (Galassi, Delo, Galassi, & Bastien, 1974; Rathus, 1973).

Motivation to seek reemployment was assessed by a combined set of three indexes (alpha = .81) based on the Fishbein and Ajzen (1975) attitude–behavior model. The indexes included questions about subjective norms, attitudes toward a behavior, and intentions to engage in that behavior (e.g., Vinokur & Caplan, 1987). Respondents also rated 6 items regarding their *job-seeking self-efficacy,* that is, how good they felt they were at performing behaviors required for getting a job, such as using their social networks to obtain job leads, preparing resumés, and interviewing. These ratings yielded an index with an alpha coefficient of .87.

Job-seeking behaviors were assessed by an index of 10 items (alpha = .86) that refer to specific activities such as preparing resumés and attending job interviews. This measure previously showed predictive validity in relation to a set of hypothesized independent variables dealing with attitudes and social influences (Vinokur & Caplan, 1987).

Mental health was assessed with subscales of state anxiety and depression from the Hopkins Symptom Checklist (Derogatis, Lopman, Rickels, Uhlenhuth, & Covi, 1974). These subscales included 9 and 11 items respectively, with alpha coefficients of .87 and .84. It was also assessed with measures of anger (Caplan et al., 1984) and self-esteem (based on Rosenberg, 1965) that included 4 and 5 items, with alpha coefficients of .88 and .72, respectively. Assessments of quality of life and of work life were based on delighted–terrible scale measures developed by Andrews and Withey (1976). The latter measures had 8 and 9 items, with alpha coefficients of .87 and .77, respectively.

Typically, reemployment is defined by some arbitrary cutoff point (e.g., working more than 5 hr, more than 20 hr, etc.). In this study, reemployment status was determined by a combination of two measures. To be classified as *reemployed,* the person had to report working at least 20 hr per week *and* had to characterize the number of hours employed as "working enough." Persons working less than 20 hr per week *and* characterizing that amount as "not working enough" were categorized as *not reemployed.* Persons who did not clearly fall into either of these categories (14%) were omitted from analyses that included the reemployment measure. This operational definition provides an unambiguous characterization in that the person is coded as employed only when meeting both subjective and objective criteria. The assessment of quality of the job included information on earnings, whether the respondent was working in that person's main occupation, and whether the job was permanent or temporary.

Results

Effectiveness of Randomization

There were no significant differences at pretest between the experimental and control groups on demographic variables, job-seeking motivation, mental health, or any other dependent variables.

Manipulation Checks on the Integrity and Strength of the Intervention

The measures of degree of participant engagement provided a close indication of the integrity and strength of the intervention. The means of these measures ranged from 3.6 to 4.6 on the 5-point scales, with standard deviations ranging from .4 to 1.3. These means suggest that the experimental intervention was perceived by the participants as establishing trust and that the participants actively practiced skills and dealt with potential setbacks. The participants viewed both the trainer and the group as attractive on a number of dimensions described earlier. In sum, the intervention was perceived as psychologically and socially positive by the participants.

Experimental Effects

Student's *t* was used to evaluate the effects of the experiment, with one-tailed significance tests of mean differences in the hypothesized direction. In this analysis, the experimental group mean is based on *all* persons assigned to the experimental condition whether or not they actually participated in the intervention. This is the only design that unequivocally preserves randomization (Cook & Campbell, 1979) and represents a true experimental design. This procedure yields a lower bound, conservative estimate of the experimental effects because it includes the dropouts.[4, 5]

Table 2 presents a summary of the significant effects. The findings address the percentage who became reemployed and then deals separately with effects for those respondents who became reemployed and for those who remained unemployed. The matrix of intercorrelations among these dependent variables, as well as those that are concerned with mental health, is presented in Table 3.

Effects on reemployment. Examining all participants, the first question is whether the intervention produced a higher rate of reemployment in the experimental than in the control group. Table 2 indicates that the experimental intervention yielded significantly greater percentages of reemployed persons at both posttests, the difference at T3 being a continuation of the advantage that appeared at T2.

Among the reemployed, at the 1-month posttest (T2), there was a statistically nonsignificant trend for the experimental group to score higher than the control group on quality of working life. By the 4-months posttest (T3), this difference had be-

[4] In designing the study, we were impressed with Janis's (1983) success in preventing relapse in a smoking cessation program by assigning participants to each other in buddy pairs. Consequently, half the experimental groups were designated as buddy groups in which similar pairings, based on preferences of the participants, were assigned at the beginning of Session 5. Participants were assigned to phone each other outside of the sessions and to continue to do so for at least a week after the sessions ended. A recent review of buddy experiments (Cohen et al., 1988) concludes buddy treatments are often not effective. In support of that review, we uncovered no significant effects of the buddy manipulation. In subsequent analyses, buddy and nonbuddy participants were combined as a single group.

[5] Alternatives to analysis of variance are available that take into account the effects of not showing up for a treatment. Heckman (1979) proposed modeling attrition and entering it as well as assignment to treatment and their interaction as predictors in a multiple regression equation. Such a procedure requires conditions that could not be met with these data. Those conditions are that one be able to predict the causes of attrition with minimal error and that one makes the assumption (untestable in our case) that these same predictors would apply to the control group. Analyses comparing dropouts, a group of respondents who indicated that they did not wish to participate in either the experimental or control program, participants, and control respondents will be the topic of another article, which will focus on nonexperimental processes of self-selection.

Table 2
Effects of Treatment on Quantity and Quality of Reemployment and Job-Seeking Attitudes at 1 (T2) and 4 (T3) Months Posttest

	Condition					
	Experimental		Control			
	M	*SD*	*M*	*SD*	*t*(*df*)	*p*
All subjects						
% Reemployed						
T2	33	.47	26	.44	1.74 (608)[a]	.04
T3	59	.49	51	.50	2.00 (623)[a]	.025
Monthly Earnings						
T2	$512	769	$322	607	3.12 (622)	.001
T3	$853	923	$723	977	1.65 (664)	.05
Reemployed subjects						
Quality of working life						
T2	5.02	1.02	4.81	1.07	1.23 (175)	n.s.
T3	4.97	1.02	4.76	1.10	1.70 (343)	.045
Monthly earnings						
T2	$1,456	780	$1,097	774	2.28 (148)	.01
T3	$1,467	857	$1,407	1128	.79 (307)	n.s.
% in Main occupation						
T2	82	.38	64	.48	2.75 (177)[b]	.004
T3	88	.34	77	.43	2.41 (343)[b]	.008
Unemployed Ss						
Self-efficacy in job-seeking ability						
T2	3.92	.80	3.75	.87	2.02 (411)	.02
T3	3.94	.79	3.72	.87	2.09 (255)	.02
Motivation to job seek						
T2	4.93	1.06	4.85	1.07	.63 (468)	n.s.
T3	4.64	1.24	4.38	1.24	.62 (304)	.06

[a] *t* test was computed on means based on assigned scores of 1 and 0 for reemployed and unemployed, respectively. [b] *t* test was computed on means based on assigned scores of 1 and 0 for employed in main occupation, and in other than main occupation, respectively.

come statistically significant. Furthermore, the percentage of persons who had found reemployment in what they characterized as their main occupation was higher for the experimental group at both T2 (82% compared with 64%) and T3 (88% compared with 77%). Among the reemployed, those in the experimental group also reported higher monthly earnings than those in the control group (a $359 difference) at T2. This difference almost disappeared at T3 and was no longer significant.

Attitudes and behaviors of the unemployed. Self-reports of posttest job-seeking behaviors were not significantly different between the treatment and control groups. At both posttests, however, the unemployed in the experimental group had higher perceived self-efficacy in their job-seeking ability. A similar, but nonsignificant, pattern also occurred for motivation to engage in job seeking.

A repeated measures *t* test was used to compare changes in the mean values across time from T2 to T3 in each group. The unemployed in the experimental group showed no decline in job-seeking motivation (mean change = −.07 scale points), whereas the unemployed in the control group did show a decline (.40 points, $p < .05$); for the experimental difference in declines, $t(145) = 1.66$, *ns*. These differences are in the same direction but somewhat different than those in Table 2 because a repeated measures design uses only persons who were unemployed at both T2 and T3. The unemployed in the experimental group also showed no decline in social support from a significant other (mean change = +.01 points), whereas the unemployed in the control group did show a decline (mean change = −.22 points, $p < .05$); for the difference between the two groups, $t(176) = -2.19$, $p < .05$. No other variables showed differences in the rate of change from T2 to T3 as a function of experimental condition.

Effects on mental health. Replicating other studies (e.g., Feather & O'Brien, 1986; Vinokur, Caplan, & Williams, 1987), people who found reemployment scored significantly lower on anxiety, depression, and anger and higher on self-esteem and quality of life than persons who remained unemployed. These findings are based on analyses of covariance adjusting for pretest levels of the dependent variables. They are shown in Table 4.

There were consistent trends at both posttests for the experimental group to score lower on anxiety and depression and higher on self-esteem compared with the control group, but none of the individual tests of effects on mental health was sta-

tistically significant. Nor were there significant effects when the reemployed and unemployed groups were examined separately.

In conclusion, the overall pattern of results is highly significant. With respect to the employment variables presented in Table 2, 10 out of the 14 comparisons were statistically significant, whereas no more than 1 is expected by chance. When additional comparisons based on the mental health variables were counted, 10 out of 24 comparisons were statistically significant, whereas no more than 2 are expected by chance.

Subgroup differences in treatment effects. Analyses were conducted to search for interactions of the treatment conditions with demographic characteristics including gender, education, and occupation. The number of effects was about what would be expected by chance and did not show any consistent pattern.

As a set, these analyses suggest that the experimental intervention provided pragmatic benefits within 1 month of the intervention in terms of reemployment and the quality of the work obtained. The findings also suggest that those in the intervention group who remained unemployed were less likely to become discouraged compared with the control unemployed group. This finding indicates successful experimental manipulation of inoculation against setbacks. The results held regardless of gender, education, or occupational group. The actual effects are likely to be considerably stronger because the analysis included 59% dropouts who did not participate in the intervention. Consequently, the results represent lower bound, conservative estimates of the effects of the intervention.

Strength of the Experimental Treatment: Effects of Number of Sessions Attended

It is possible to analyze the effects of the intervention in terms of a dose–response effect or degree of participation by the unemployed. Within the experimental condition, the mean number of sessions attended was 6.2 (SD = 2.1). The number of sessions attended was associated with posttest outcomes at T2 but not at T3, mirroring the set of findings for participant engagement. Where possible, pretest levels of the dependent variables as well as the previously mentioned demographic controls were entered into regression analyses. Consequently, the findings are reported in terms of residualized change scores.

Dose–response effects of participation appeared for those who gained reemployment at the first posttest but not for those who remained unemployed, and generally not at T3. Regarding effects on T2 outcomes, the more sessions the reemployed had attended, the greater was the increase in quality of life (partial r = .33, $p < .05$; df = 48 to 50 for these analyses), self-esteem (.43, $p < .05$), and perceived self-efficacy in job-seeking (.43, $p < .01$). There were no effects of number of sessions attended on likelihood of reemployment or, among the reemployed, on earnings per month or whether the person obtained permanent rather than temporary reemployment. There was a positive, weak association between number of sessions attended and gaining reemployment in one's main occupation (probit analysis ratio = 2.36, 1.4% additional variance explained, $p < .01$). This effect should be interpreted with caution because there is no pretest measure of the dependent variable.

In sum, the greater the participation in the sessions among those who attended, the greater the social and psychological benefits, particularly for the reemployed. The effects were concentrated in the first pretest after the intervention.

External determinants of participant engagement. The measures of participant engagement were completed by the participants in the intervention. They provided an opportunity to examine both the antecedents and the outcomes of variation in individual experiences *within* the experimental condition. A search analysis of the pretest data was conducted to identify characteristics of respondents that predict the degree of their engagement in the intervention. Any so-identified characteristics were used as pretest covariates to control for preexisting individual differences in readiness to become engaged in the intervention.

Multiple regression analyses were used to examine the contributions to engagement in the intervention of age, sex, education, income, occupation, and levels of several psychosocial states prior to entering the experimental intervention. The latter were assessed with pretest measures of poor mental health, self-esteem, quality of life, job search self-efficacy, positive social support, and assertiveness. The multiple correlation of all of these predictors was .46 ($p < .01$). Only two of the variables were significant predictors of participant engagement. Women (partial r = .30, $p < .01$) and persons reporting more social support from a significant other (partial r = .21, $p < .01$) were more likely to score higher on participant engagement. There was also a trend for more assertive persons to report higher engagement (beta = .13, $p < .10$).

Effects of participant engagement on proximal outcomes. There are two types of outcomes. Proximal outcomes are those that were assessed at the end of the last two sessions of the intervention (Sessions 7 and 8). The second type of outcomes is the standard posttest outcomes at T2 and T3. By examining these outcomes, it was possible to examine the trajectory of the effects of the intervention from the point where the intervention ended to a period 4 months later.

Based on the preceding analysis of nonexperimental determinants of participant engagement, we included as covariates in multiple regression analyses the pretest level of social support from the significant other as well as gender, age, education, total family income in the preceding 12 months, occupation, and the pretest level of the dependent variable when available. The dependent variable can be viewed as a change score in cases in which its pretest level was included (Cronbach & Furby, 1970). The statistic reported is the partial correlation for the engagement variable.

As positive perceptions of process implementation and self-participation in the process increased across persons, so did reports of the number of job-seeking activities that involved talking to members of one's social network and prospective employers, and working on resumés (.19, $p < .01$), intention to engage in job seeking (.22, $p < .01$), and confidence in job-seeking ability or self-efficacy (.49, $p < .01$). Such persons also perceived the greatest improvement in their knowledge about appropriate methods of job seeking, job-seeking skills, and their job-search motivation (.54, $p < .01$).

Earlier, we described manipulation check data that indicated that the intervention achieved its process aims. These data add to this conclusion by showing that the greater the engagement of participants in the intervention, the greater their job-seeking

Table 3
Matrix of Intercorrelations Among the Dependent Variables at T2 (Lower Triangle) and at T3 (Upper Triangle)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Anxiety		.84	.68	−.49	−.61	−.17	−.17	−.36	−.24	−.20	−.11	.21
		(623)	(623)	(623)	(616)	(525)	(561)	(369)	(337)	(375)	(324)	(301)
2. Depression	.85		.69	−.62	−.72	−.19	−.20	−.38	−.27	−.21	−.17	.22
	(632)		(625)	(624)	(616)	(525)	(561)	(369)	(336)	(375)	(325)	(302)
3. Anger	.71	.68		−.41	−.52	−.13	−.14	−.30	−.22	−.14	−.07	.16
	(631)	(631)		(625)	(617)	(528)	(563)	(369)	(336)	(375)	(327)	(304)
4. Self-esteem	−.51	−.59	−.38		.72	.11	.13	.41	.19	.13	.35	−.22
	(631)	(631)	(630)		(619)	(529)	(564)	(369)	(337)	(377)	(327)	(304)
5. Quality of life	−.63	−.75	−.54	.69		.11	.16	.46	.24	.13	.31	−.24
	(629)	(629)	(629)	(629)		(524)	(558)	(365)	(334)	(371)	(321)	(299)
6. Reemployment[a]	−.15	−.17	−.09	.05	.16		.69	NA[a]	NA[a]	NA[a]	NA[b]	NA[b]
	(527)	(527)	(527)	(526)	(526)		(494)	(—)	(—)	(—)	(—)	(—)
7. Monthly earnings	−.11	−.12	−.08	.07	.12	.81		.20	1.00	.26	NA[b]	NA[b]
	(532)	(532)	(532)	(531)	(530)	(480)		(329)	(340)	(337)	(—)	(—)
8. Quality of work life[a]	−.21	−.27	−.19	.29	.32	NA[a]	.26		.20	.27	NA[b]	NA[b]
	(197)	(197)	(197)	(196)	(197)	(—)	(163)		(329)	(366)	(—)	(—)
9. Monthly earnings[a]	−.08	−.11	−.10	.16	.12	NA[a]	1.00	.26		.26	NA[b]	NA[b]
	(169)	(169)	(169)	(168)	(168)	(—)	(169)	(163)		(337)	(—)	(—)
10. Job in main occupation[a]	−.11	−.13	−.04	.18	.04	NA[a]	.38	.41	.31		NA[b]	NA[b]
	(210)	(210)	(210)	(209)	(209)	(—)	(173)	(195)	(169)		(—)	(—)
11. Efficacy in job-seeking[b]	−.19	−.24	−.14	.37	.36	NA[b]	NA[b]	NA[b]	NA[b]	NA[b]		.06
	(481)	(481)	(481)	(482)	(480)	(—)	(—)	(—)	(—)	(—)		(267)
12. Motivation for job-seeking[b]	.12	.11	.05	−.02	−.08	NA[b]	NA[b]	NA[b]	NA[b]	NA[b]	.14	
	(466)	(466)	(466)	(467)	(465)	(—)	(—)	(—)	(—)	(—)	(467)	

Note. T2 = 1 month posttest; T3 = 4 months posttest. This matrix of correlations includes all the variables presented in Tables 3 and 4. Numbers in parentheses refer to the number of respondents.
NA[a] Not available; data on this variable were collected only from the *reemployed* respondents. NA[b] Not available; data on this variable were collected only from the *unemployed* respondents.

activities and perceived knowledge, skills, and motivation with regard to job seeking during the course of the intervention period.

Effects of participant engagement on posttest outcomes. With one exception, there were no differences in the effects of participant engagement on those who found employment and those who remained unemployed. Among those who remained unemployed, engagement was associated with increased self-efficacy in job seeking (partial $r = .29$, $p < .01$). Nor were there effects within the employment and unemployment subgroups. Consequently, the findings focus on the total sample in the experimental group.

Table 4
Effects of Reemployment on Indicators of Mental Health

	Unemployed		Reemployed			
Indicator	*M*	*SD*	*M*	*SD*	*t*(*df*)	*p* <
Anxiety						
T2	1.96	.82	1.67	.63	5.99 (710)	.001
T3	1.96	.86	1.68	.65	5.72 (620)	.001
Depression						
T2	1.94	.78	1.67	.65	5.74 (712)	.001
T3	1.94	.80	1.68	.65	5.84 (715)	.001
Anger						
T2	2.13	.97	2.00	.97	1.93 (712)	.01
T3	2.08	.95	1.98	.82	1.76 (715)	.01
Self-Esteem						
T2	3.95	.84	4.12	.79	3.46 (709)	.01
T3	3.93	.84	4.11	.80	3.84 (715)	.02
Quality of Life						
T2	4.61	.95	4.92	1.01	5.25 (708)	.001
T3	4.65	.99	4.90	.93	4.58 (710)	.001

Note. T2 = 1 month posttest; T3 = 4 months posttest. Means are adjusted for T1 score on the dependent variable.

Analyses involving *changes* showed that as participant engagement increased, there were significant *gains* in internal control (.20, $p < .01$) and job-seeking self-efficacy (.29, $p < .01$). There were also *decreases* in depression (−.20, $p < .01$) and anger (−.15, $p < .05$), and *increases* in self-esteem (.14, $p < .05$, one-tailed test) and quality of life (.27, $p < .01$).

Participant engagement also predicted hours of employed work 4 weeks later (.19, $p < .01$) and the likelihood of being reemployed in one's main occupation (.20, $p < .01$) and of being in a permanent, rather than temporary, job (.23, $p < .01$). There was a nonsignificant trend for more engaged persons to have higher monthly earnings (.12, *ns*). These effects of within-experiment variation appeared to be short-term; none were present at T3.

These findings are subject to alternative interpretations because they are based on a survey design. One has to consider the possibility that a third variable, unrelated to the dynamics of the intervention, caused both participant engagement and the effect on the outcome variable. In the case of the change score analyses, this possibility was reduced by the inclusion of the pretest measure of the dependent variable—usually, in our

experience, the most powerful of all predictors in longitudinal models.

Discussion and Conclusions

This randomized field experiment was designed to test hypotheses about the effect of providing social support and altering skills, behaviors, and cognitions relevant to coping with a major life stressor: loss of employment. As hypothesized, the experimental intervention produced higher rates of reemployment in the experimental than in the control condition. It also yielded positive effects both for those who obtained reemployment and for those who did not within the period of the posttest evaluations. For the reemployed, quality of reemployment was higher in the experimental condition than in the control condition. For the unemployed, motivation to engage in job seeking and job-seeking self-efficacy were higher in the experimental condition than in the control condition. There were also consistent trends suggesting that this type of intervention may alleviate some of the negative mental health consequences of job loss among the unemployed. The use of a complete experimental design that included dropouts in the analyses preserved the integrity of the randomized experimental design and allowed firmer conclusions about the experimental effects. Such a design, however, yielded lower-bound, conservative estimates of these effects.

The analysis of the participant engagement measures suggests that the more the participants became engaged in following the principles and procedures provided in the intervention and perceived the intervention to be attractive, the stronger was their subsequent motivation to engage in job seeking. The effects of participant engagement were detectable 1 month after the intervention (T2) in terms of number of hours of reemployment and quality of reemployment. Among the unemployed, the effects of engagement—increased motivation, lowered levels of depression, and higher levels of self-esteem—were detectable at T2, but disappeared 4 months after the intervention. This pattern suggests that the effects of the intervention were stronger and more long-lasting than those due to individual differences in how the intervention engaged the participants.

At the most general level, this field experiment has demonstrated that interventions that establish trust, engender skills and the motivation to use them, inoculate against setbacks, and provide social support are capable of helping people succeed in a difficult task in spite of setbacks and failures. The experiment was aimed specifically at those who have lost their jobs. Nevertheless, we believe that because the theoretical components of the intervention are derived from basic research on motivation and coping, they are potentially applicable to preventive interventions dealing with a wide range of difficult life tasks and decisions.

Although the results of this study are encouraging, a number of research issues remain. These involve matters of design as well as the elaboration of the models' parameters.

Disaggregating elements of the intervention process. One key goal of this study was the development of a set of process measures that would make it possible to assess the relative contributions of various components of the intervention. Those components included moderate self-disclosure, positive reinforcement by the trainer, and inoculation against setbacks. The uniformly high ratings that were given on these dimensions, however, yielded a single index rather than a set of discrete ones. Researchers will continue to face this problem as they attempt to resolve the conflict between introducing one fully standardized complete intervention and a control condition (at one end of the design continuum) and costly multifactorial designs that systematically vary all the elements (at the other end of the continuum).

Who should receive the intervention? Is nonparticipation necessarily disadvantageous? In our study we have follow-up data on persons who attended as well as did not attend the intervention. Future analyses will compare outcomes for those two groups, distinguishing among those who refused to participate in the experiment and those who agreed to but either did not show up or dropped out. Our informal perusal of the data suggests that there may be some refusers who made a correct decision and that there may be others who made the wrong one. Identifying the characteristics of these different subgroups could suggest bases for counseling persons regarding whether they would benefit from a particular program.

Who should deliver the intervention? From the outset, we decided that it was important to select trainers who were not professional counselors or clinicians. We assumed that mental health professionals, particularly those aligned with mental health clinics, would lack the motivation to focus specifically on unemployment-related counseling. We further assumed that it would be better to select persons who came from backgrounds that combined public speaking and communications with some experience in working with groups; we assumed that such persons would be more likely to comply with a standardized protocol than would clinicians. We also assumed that mental health agencies might be inadequate catchment points for recruiting persons in need of job-seeking counseling and that local unemployment agencies would be superior. There are no known empirical data on which to base these assumptions. If such assumptions are critical to policy planning, then related research is warranted to test their validity.

As for *where* and *when* such interventions should take place, prior warnings of impending unemployment and the ability to prepare for finding a new job can reduce the debilitating effects of job loss (Fineman, 1983). This experiment produced beneficial effects among the recently unemployed. Future studies might evaluate the additional benefits hypothesized to occur by introducing the intervention to groups facing layoffs. By varying the period prior to actual layoff and including a period that bridges the period before and after layoff, it should be possible to determine the joint effects of the timing and nature of preventive intervention.

What should be the role of significant others? This study did not include the spouse as an active participant in the intervention. On the one hand, our previous research (Vinokur & Caplan, 1987) suggested that spouses can support the unemployed person's attitudes and intentions to engage in job seeking and can provide an important emotional safety net during setbacks. On the other hand, the current experimental literature on spouse support (which deals primarily with health behaviors; Cohen et al., 1988) indicates that the inclusion of spouses is sometimes worse than not including spouses. Past experiments

may have failed because they placed husbands and wives in relationships in which the independence of the target person was undermined by the spouse (e.g., Coyne & DeLongis, 1986). Further theory and theory-guided research will be required to use the spouse as an ally rather than an adversary without generating reactance (Brehm, 1966).

Without detailing the issues, there is a similarly rich area for exploration regarding the use of peer support. The minimal social distance between helper and recipient is an advantage in increasing adherence to a regimen of behavior promulgated by the helper (Baeklund & Lundwall, 1975). Peers, like spouses, however, can also undermine the support for courses of action recommended by a trainer. Conceptualization and research on the effective use of peer and spouse support could provide an important avenue for increasing the effectiveness of preventive interventions with the unemployed as well as for other at-risk groups.

Implications for practice. The question of whether this particular intervention will apply in other times, settings, cultures, and subcultures remains to be answered. Nevertheless, this and other studies in the literature suggest that preventive interventions that focus on the motivational and skill aspects of coping with job loss can lead to better quality reemployment and enhance the motivation to continue job seeking among those who are still unemployed. It also appears that such interventions will be successful particularly if they accept setbacks as natural sequelae of attempting new behaviors and prepare people to overcome such setbacks. It appears that persons who are skillful in working with people, but have no other professional training, can serve as trainers, particularly if they (a) are carefully trained in principles of positive reinforcement and group facilitation, (b) are given a protocol based on the best available theory, and (c) are monitored to maintain their performance. As simple as this is to describe, we have found the pursuit of these requirements to be a demanding and nontrivial task.

In conclusion, we note that the Great Depression spurred social science interest in coping with unemployment. The major structural changes of today's labor market (Kaufman, 1982) again challenge social and behavioral scientists to help society cope with these major changes. The renewed social science interest in this topic is timely and perhaps urgent.

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