AN EXPERIMENTAL APPLICATION OF A SOCIAL REINFORCEMENT APPROACH TO THE PROBLEM OF JOB-FINDING¹

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The current conception of the employment process is that positions become available, are publicized, and are filled by the most qualified job seekers. An alternative conception is proposed that social factors play a major role in the process and that job finding can be analyzed as an exchange of social reinforcers in which the first behavioral step is to locate job openings. A questionnaire survey of 120 jobs found that two-thirds of the job leads came from friends or relatives who: (1) usually knew of a specific opening (63%); (2) were themselves employed by the hiring firm (71%); and (3) actively influenced the hiring process (53%). An experimental evaluation was made of an "Information-Reward" advertisement procedure for motivating community residents to report unpublicized openings. It was found that the Information-Reward procedure produced 10 times as many job leads and eight times as many placements as a no-reward control advertisement. These findings represent a first step toward a much needed technology of job finding that is based on experimental evidence and support the notion that the employment process depends on factors unrelated to work skills.

Gainful employment is the single most reliable means for obtaining the fundamental benefits, privileges, and satisfactions available in our society. Economic security, recreational and educational opportunities, social status, family prerogatives, and medical benefits are some of the many advantages that accrue to satisfactory employment. Conversely, joblessness is associated with, and may be causally related to, such problems as crime (Wilson, 1970; Johnson, 1964), mental illness (Hollingshead and Redlich, 1958), alcoholism (Johnson, 1964), racial discrimination (Hildebrand, 1966), medical neglect

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(Bakke, 1960), and eviction and family desertion (Wickendon, 1965). General recognition of the critical importance of employment to the individual is evidenced by the numerous pamphlets, books, and manuals available to assist the job seeker. The job-getting methods most commonly suggested in these materials are to look at Help Wanted advertisements, to apply to company personnel offices, to dress and speak properly during interviews, to obtain job-related training, to place Situation Wanted advertisements, to learn how to fill out employment forms, to ask friends about openings, and to register with employment agencies (e.g., Dreese, 1970; Peskin, 1967; Randall, 1966; Marshall, 1964).

Surprisingly, the great importance and apparent concern with job finding is paralleled by an absence of experimental evidence regarding the comparative effectiveness of any of these procedures. Thus, from the point of view of the unemployed, a systematic and experimentally based technology of job getting is not available. The employment process continues to be viewed, intuitively, as a straightforward matching of the work requirements of employers with the job

qualification of available applicants. Formal and typically public channels of job information such as classified newspaper advertisements, employment agencies, and Civil Service publications are seen as the primary media for this matching.

Social reinforcement theory suggests both an alternative conception of the employment process and a new and potentially useful approach to the problem of placement. When an employer, presumably motivated by personal profit, offers a job, he is offering the opportunity for another person to obtain monetary reinforcement. Several consequences other than financial profit to the employer may follow the act of hiring. The employer may gain a friend, a pleasant and socially rewarding working colleague, or the satisfaction of repaying a social or familial debt. Since employed friends and relatives of unemployed persons often bring these persons to the attention of employers (Sheppard and Belitsky, 1966), such employed persons are also in a position to provide job-opening information as a reinforcer. Unlike employers, however, the motivation of non-employer job informants may be ascribed entirely to social factors, since these individuals are not directly concerned with business success or profit. Thus, social reinforcement theory portrays the employment process as an informal job-information network in which persons with early knowledge of job openings (employers and employed persons) selectively and privately pass this rewarding information on to their unemployed acquaintances who are then likely to reward the job informants in social ways. Since job getting begins with the discovery of available positions, social and reinforcement factors should be especially important at this initial stage of the process.

A survey and an experiment were conducted to explore the social reinforcement conception of the job-getting process. The survey attempted to determine the extent to which job seekers rely on the information, influence, and assistance of personal associates to locate and to secure jobs. The experiment sought to determine

whether monetary reward could be used to motivate potential job informants by offering substantial, publicly announced monetary rewards for job information resulting in the placement of any member of the subject pool. The reward procedure was experimentally compared with simple public advertisement of the availability of the job seekers, a procedure commonly used by private and public employment bureaus.

I. SURVEY EVALUATION OF CURRENT JOB-GETTING METHODS

METHOD

Subjects

Completion of an occupational survey was requested of all graduate students (N = 90) enrolled in a masters' degree program at a large state university. The sample contained 48 males and 42 females. All were over 21 yr of age and had held one or more full-time jobs.

Materials and Instructions

Table 1 presents the entire "Job Access Survey". Each subject was asked to complete three copies of this questionnaire; one for each of his three most recent jobs.

Procedure and Reliability Check

The surveys were distributed to the subjects via their department mailboxes. Two months after the distribution and return of the questionnaires, phone calls were made to a randomly selected sample of six of the respondents to determine how accurately they could reproduce the information they had provided on the original written questionnaires. All questions were read to these subjects over the phone and their responses were recorded by the experimenter.

RESULTS

Of the 60 surveys that reached their intended subjects, 48 were returned. Because the project was conducted near the end of the school term, it was not possible to contact those who received

Table 1 Job Access Survey

1.	Firm, agency, or organization for whom you worked:
2.	Job title or description of work:
3.	Worked from 19 to 19 month year year
4.	Salary per month: \$ If commission, average per month: \$
5.	How did you first hear about the job opening? (check one) A. State employment agency B. Private employment agency C. "Help wanted" ad in newspaper D. "Employment wanted" ad in newspaper E. Civil Service bulletin or radio announcement F. I heard there might be an opening from a friend, relative or acquaintance G. I had not heard about an opening but applied anyway H. Other (specify briefly)
6.	If you checked answer F for the last question, answer the following: A. How well did you know the person who told you that there might be a job opening? (check one) 1) He was a relative 2) He was a close friend 3) He was a casual acquaintance B. How specific was the job information which that person gave you? (check one)
	1) He knew of a specific job that was open 2) He had only heard that the firm or organization was looking for help C. How did that person know that there might be a job opening? (check one) 1) He was employed by the same firm or organization 2) He was employed by the same firm or organization
	2) He was not employed by the same firm but knew someone who was 3) Other (specify briefly)
	 D. Did the person who told you about the job opening help you get the job? (check one) 1) Yes, he was in a position to make hiring decisions for the firm or organization (e.g., he was the owner or personnel officer, etc.) 2) Yes, he was in a position to influence the people who made hiring decisions for the firm or organization (e.g., he knew the owner or personnel officer, etc.) 3) No, he was not able to help other than to tell me that there might be an opening
7. ·	To your knowledge, was the availability of the position announced publicly in any way? (check one) A. Yes B. No

but did not return the surveys. The returned surveys yielded job access information describing 120 full-time jobs.

Table 2 shows that "Friends, relatives, or acquaintances" provided the initial job lead in two-thirds of the jobs reported. Applications to firms without prior job-opening information accounted for 15% of the remaining jobs and public employment agencies were the first source of 8% of the jobs. Each of the other sources accounted for 5% or less of the reported jobs.

Table 3 shows that friends, relatives, and acquaintances accounted about equally for the initial job leads that involved personal contacts. In over half of these cases, the job lead was with reference to a specific opening. In almost three-fourths of the cases, the informant was also employed by the firm in which the opening was available. Over half of the informants provided assistance to effect the placement of the respondents. In most instances, this assistance involved indirect influence over someone with hiring authority.

Fifty-five per cent of all positions reported were described as having been unpublicized, 45% as having been announced publicly in some way.

The six respondents who were called as part of the reliability check gave exactly the same answers to each question as they had given previously on the written questionnaire.

II. EXPERIMENTAL EVALUATION OF AN INFORMATION-REWARD PROCEDURE FOR LOCATING JOBS

METHOD

Job Applicants

By prior arrangement with a branch of the Illinois State Employment Service (ISES) serving one rural county, this experiment included all unemployed persons registered with that branch during the project period. A government analysis of the unemployment situation during this period showed an expected seasonal slow-

Table 2: First Source of Job Information (N = 120 Jobs)

	Per Cent of Total Jobs
Friend, Relative, or Acquaintance	66
Applied Without Information	15
Public Employment Agency	8
"Help Wanted" Advertisement	5
"Employment Wanted" Advertisement	2
Private Employment Agency	2
Other	2
Total	100

down that resulted in the unemployment of 1175 persons out of a total work force of 22,250 (Illinois Bureau of Employment Security, 1970a; 1970b). The largest city in the county was designated with only two other cities in the state as an "Area of Concentrated Unemployment" during this period (U.S. Department of Labor, 1970a; 1970b).

Table 3

Nature of information and assistance provided if first source of job information was a personal contact (N = 89 jobs).

	Per Cent of
	Corrected Total
Relationship if Friend, Relative or	
Acquaintance	
Close friend	38
Relative	34
Casual acquaintance	28
	100
Specificity of Information Provided	
Knew of a specific position that	
was open	63
Had only heard that the firm was	
hiring	37
·	100
Relationship of Informant to Firm or Organization	
Employed by same firm	71
Not employed by same firm	29
	100
Help Provided in Getting the Job	
Informant unable to help Informant influenced someone with	47
hiring authority	44
Informant had hiring authority	9
•	100

Experimental Design

The job-producing effectiveness of two kinds of newspaper advertisements was compared. Both ads solicited job-opening information, but the experimental ad offered a \$100 reward for information resulting in the employment of any member of the subject pool. The control ad was similar in format and identical in size to the experimental ad but did not include the reward offer. The ads were displayed over a three-week period, the control (no-reward) ad being displayed during the first week, the experimental (reward) ad during the second, and the no-reward ad again during the third week. Both ads were displayed in the only local newspaper serving the entire county.

No-reward ad procedure. The no-reward ad (Figure 1) was placed under the auspices of the Illinois State Employment Service (ISES) and all responses to it were administered by the participating branch agency. The occupational categories indicated were those that described the greatest number of ISES registrants at the time as reported by the Counseling Supervisor. The telephone number given in the ad was the number of the ISES' office. The ad directed respondents to ask for Mr. Martin, a code name,

to permit the ISES receptionist to discriminate between calls made in response to the ad and incoming calls unrelated to it. The receptionist referred all calls for "Mr. Martin" to any one of three counselors who handled these calls routinely but kept a record of the date and disposition of the job leads provided.

Information-reward ad procedure. The content of the reward ad (Figure 2) was similar to that of the no-reward ad except for the statement of the reward. Other minor differences were also necessary. The telephone number was that of the office from which the project was conducted, rather than the ISES' office. The assumed agency title, Southern Illinois Special Placement Project, was necessary because of state law. This assumed title was intended to be non-specific but official in appearance.

Since the reward ad itself represented an offer to engage in a legally binding agreement and because the ad space was too small to permit the precise specification of this agreement, this specification was provided over the telephone. The project receptionist read a prepared description of the agreement to all callers before permitting them to relate their job-opening information. The essential aspects of this agreement were: (1) that any applicants sent for a

Illinois State Employment Service

We currently have applicants seeking employment in the following occupational categories.

Clerk-Typist

Sales Clerk

Stenographer

Keypunch Oper.

Grocery Clerk

Janitor

Welder

Mechanic

Truck Driver

Bookkeeper

Factory Worker

Nurse's Aid

If you know of a position which is or will soon be open in one of these job categories, please call

684-3161, Ask for Mr. Martin.

Fig. 1. Control (no-reward) advertisement.

SOUTHERN ILLINOIS SPECIAL PLACEMENT PROJECT

\$100.00 JOB LOCATER FEE

will be paid to any person who provides information about a job opening which results in the employment of one of our job applicants. We are presently attempting to locate job openings in the following occupations:

STENOGRAPHER NURSE'S AID BOOKKEEPER GROCERY CLERK TRUCK DRIVER

CLERK-TYPIST

WELDER
JANITOR
KEYPUNCH OPER.
SALES CLERK
MECHANIC

FACTORY WORKER

If you know of a job opening in one of these occupational areas, please call 549-4411, weekdays 1 p.m.-5 p.m. for details. Ask for Placement Services. (This is a non-profit demonstration project.)

Fig. 2. Experimental (reward) advertisement.

job interview as a result of the caller's information would identify themselves as participants in the Project; (2) that a Project applicant must be actually hired before payment would be made; (3) that an initial payment of \$25 would be made to the caller at the time an applicant was hired and that three additional payments of \$25 would be made to the caller at the end of each of the applicant's first three weeks of successful employment; and (4) that the names of all job locators would be kept confidential. All callers who accepted the terms of this agreement were required to provide the following information: (1) the caller's name and address (payments were made by mail); (2) the name of the employer or firm where the job opening was available; (3) the address of the employer or firm; (4) the title or description of the job that was available; (5) the approximate weekly salary to be paid for the position; and (6) the name of the person (supervisor, personnel manager) to whom applicants should apply. This same information is routinely requested of any person calling the ISES with job-opening information. Callers were also asked, informally, how they knew about the job openings which they described. With the exception of the names and addresses of callers and the nature of their job-opening knowledge, all appropriate job-lead information was relayed immediately by the Project receptionist to the ISES' office. These job leads were handled in the customary manner by the ISES personnel except that applicants sent for interviews were instructed to tell the person to whom they applied that they were participating in the Southern Illinois Special Placement Project and were asked to notify the ISES office immediately if they were hired.

Follow-up procedure. Two months after the completion of the advertisement procedure, telephone calls were made to all employers who had hired clients during the no-reward and reward phases of the project. These employers were asked if the persons whom they hired were still working and if not, whether they had been dismissed or had left of their own choice.

RESULTS

Daily telephone calls confirmed that the instructions given to ISES personnel had been followed without difficulty.

Table 4 shows that during the first week of publication of the no-reward ad, two calls were received by the ISES' office, each reporting one job opening. One of these calls was refused because the job opening reported was not in the area served by the ISES. A single applicant was sent to be interviewed for the remaining position and that applicant was hired. The follow-up indicated that this applicant was still working after two months. No calls were received in response to the no-reward ad during the third week.

The reward ad produced 14 calls and a total of 20 job leads during the single week it was displayed. Again, one of the calls reported a job opening outside of the appropriate area and had to be refused. Applicants were sent to interview for the remaining 19 job openings and eight of these applicants were hired. Each of the eight applicants placed worked for at least one month; the full \$100 job-locator fee was paid for each caller whose job lead resulted in a placement. The follow-up calls revealed that of the eight

Table 4

Comparison of the reward advertisement and noreward advertisement procedures in locating job
openings and facilitating actual placements.

	No- Reward Ad (First Week)	Reward Ad (Second Week)	Ad
Number of calls received Number of job-openings	2ª	14º	0
reported	2	20	0
Number of applicants sen for interviews Number of applicants	t 1	19	0
actually hired Number still working	1	8	0
after 1 month	1	8	0

^aOne call refused because job was outside of appropriate geographical area.

applicants originally hired, five were still working after two months. Of the three who were not, all had left voluntarily.

Chi-square tests were performed on the differences between the results of the reward ad and the no-reward ads (first week versus second week; second week versus third week). The reward ad (second week) produced significantly (Chi-square < 0.025) more calls, more reports of job openings, more applicants accepted for interviews, more applicants hired, and more applicants employed for at least one month than did the no-reward ad (first week or third week).

All callers responding to the reward ad were asked how they knew about the job opening that they were reporting and what their relationship was to the employer or firm where the reported opening was available. Of the 20 job leads received, nine were from job informants who were themselves in a position to make hiring decisions for the firm involved; six of these nine leads produced placements. Eight leads were from informants who were either occupationally or socially related to the employer where the opening was reported and were thus in a position .to influence hiring decisions; two of these eight leads produced actual placements. Three of the informants were neither employed by nor socially related to the employer and no placements resulted from their job leads.

DISCUSSION

The job-getting process is commonly conceived of as matching the work requirements of employers with the skills of the best qualified available applicants. This prevalent conception of the process would predict: (1) that most jobs obtained by the survey respondents had been formally publicized, (2) that the job applicants had heard of the job openings from these public sources, and (3) that job qualifications and not personal influence operated once the job applicants applied for the positions.

The results of the survey aspect of the present study do not support this conception of job finding. First, the role of informants was dominant in securing employment, only 22% of the jobs reported were secured without a personal informant, a percentage in general agreement with those (10 to 20%) reported in previous surveys (Adams and Aronson, 1957; Myers and Schultz, 1951). Furthermore, actual placement was more likely if the informant had a prior personal relationship with the applicant (friends, relatives, and acquaintances) than when he was a professional job informant (employment agencies). The low rate of placement by impersonal job informants confirms the results (5 to 12%) of previous surveys (Adams and Aronson, 1957; Edelman, 1952). The surprising finding in the present study that two-thirds of the job placements were initiated by personal associates has been previously noted in only one survey of job efforts in a circumscribed geographical area (Sheppard and Belitsky, 1966). The present results further revealed that the personal associates did not serve merely as passive conveyors of information about available positions. Instead, they frequently influenced employers to hire specific applicants. The active role played by the informants is also evidenced in the finding that most of the jobs obtained had not been formally publicized; in this characteristic situation, the personal informant was the only avenue to these positions.

This conception of the employment process as an active exchange of private information and favors, and the resultant maintenance of social relations is reflected in father-son businesses and labor union membership; nepotism; the limited success of employment agencies; and discrimination in hiring against racial and religious minorities, former mental hospital patients, and former alcoholics. If the present analysis is accurate, these practices are not isolated exceptions to the general rule of hiring according to jobrelevant qualifications, but rather manifestations of the pervasive practice of hiring primarily on the basis of social considerations.

The information-reward procedure was effective in producing more job leads and more place-

ments than the control procedure. In spite of the longer duration for which the no-reward advertisement was displayed, the information-. reward ad produced nine times as many leads and eight times as many actual placements. This difference in effectiveness is attributable to the contingent reward feature of the experimental procedure, since the research design held comparable other variables such as type of job skills available, personal and occupational characteristics of the applicants, the occupational-economic environment, and the method of processing the job leads. The possibility of differential demand characteristics of the advertisements was minimized by their comparability in size, configuration, and general content, and by the public nature of both placement agency titles.

Application of the information-reward procedure must be based on practical considerations. The average cost per placement was \$130 under the reward ad procedure (the cost of the ad divided by the number of placements plus the \$100 reward) as compared with \$470 under the no-reward ad procedure (the cost of the ad divided by the number of placements). This \$130 cost compares favorably with the average cost of \$490 that private agencies would have charged for these placements, based on the standard fees authorized by the State of Illinois Department of Labor. A second consideration is whether the incentive resulted in marginal, temporary, or otherwise undesirable types of jobs. The results indicate that this was not the case. The jobs were all full-time, and at salaries above the legal minimum and comparable to the prevailing rates in this rural area, about \$500 per month. The employment endured for at least one month for all jobs and five applicants were still employed after two months. Continued employment after the three weeks of the reward period indicates that there were no attempts to circumvent the intended objective of the procedure by firing employees after the reward period. All employees who left their jobs did so voluntarily. To reduce further the likelihood of hiring only to obtain the reward and then dismissing the employee, a longer reward payment period might be desirable in practice.

The results of the experiment emphasize the value of a behavioral analysis of the employment process. This analysis considers the component behavioral events involved in securing a job, such as discovering who controls available jobs, increasing the motivation of the hiring agent, utilizing pre-existing relationships between applicant and hiring agent, and improving the motivation of job informants. This analysis further suggests that relevant job-getting behaviors be determined empirically and reinforcement contingencies arranged to support these behaviors in an effort to achieve the terminal result, that is, obtaining the job.

Several tentative recommendations for vocational counseling are suggested by the results of this study. First, if it is determined that a job-seeking client enjoys numerous social contacts with employed persons, he should be encouraged to capitalize on these contacts. Second, if a client has been excluded from the jobinformation network by virtue of recent military service, mental hospital institutionalization, incarceration, or long-term unemployment due to child-rearing responsibilities, for example, every effort should be made to help him cultivate new social contacts for the purpose of gaining entry into the job-information network. (It may be reasonably speculated, on the basis of the present findings, that the hard-to-place populations just mentioned face special employment problems because of their loss of membership in the job network.) The reward ad procedure offers a productive supplement to developing the social sphere of socially inactive job seekers. This method provides monetary, rather than social, reinforcement to motivate active current members of the job network to provide jobopening information to persons not known to them.

Quite apart from the specific procedure used here, the present study constitutes a first effort to evaluate experimentally the merit of any jobgetting technique. Gainful employment is of such major importance that additional experimentation is needed to provide a basis in knowledge for recommending one job-getting approach over another. Hopefully, such experimentation will yield a comprehensive and data-based technology with which to attack the distressing problems associated with pervasive unemployment.

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