INSTITUTE FOR RESEARCH IN LEARNING DISABILITIES
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Emphasis on Adolescents and Young Adults

TEACHING JOB-SEEKING SKILLS TO LEARNING DISABLED ADOLESCENTS: AN EXPERIMENTAL ANALYSIS AND SOCIAL VALIDATION

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Research Report No. 41
April, 1981
The University of Kansas Institute for Research in Learning Disabilities is supported by a contract (#300-77-0494) with the Bureau of Education for the Handicapped, Department of Health, Education, and Welfare, U. S. Office of Education, through Title VI-G of Public Law 91-230. The University of Kansas Institute, a joint research effort involving the Department of Special Education and the Bureau of Child Research, has specified the learning disabled adolescent and young adult as the target population. The major responsibility of the Institute is to develop effective means of identifying learning disabled populations at the secondary level and to construct interventions that will have an effect upon school performance and life adjustment. Many areas of research have been designed to study the problems of LD adolescents and young adults in both school and non-school settings (e.g., employment, juvenile justice, military, etc.)

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The preparation of this document was supported by a government contract. The views expressed here are those of the Institute, and do not necessarily reflect official positions of the Bureau of Education for the Handicapped, DHHS, USOE.
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ABSTRACT

Procedures designed to teach the skills involved in completing an employment application and resume writing were evaluated with three learning disabled adolescents using a multiple-baseline design. Training involved reading instructional materials, practicing skills on sets of application materials to a criterion performance, and trainer feedback during and after each practice trial. Results showed that training was effective in teaching resume writing and employment application completion skills. Rating data obtained from potential employers suggest that training was effective in improving the appearance and content of the application materials. In addition, the employers viewed applicants as better qualified for employment after training and stated that they were more likely to invite the applicants in for a job interview. The study demonstrates an effective method of training job-seeking skills and for assessing the impact of training on employers' perception of the applicants.
COOPERATING AGENCIES

Were it not for the cooperation of many agencies in the public and private sector, the research efforts of The University of Kansas Institute for Research in Learning Disabilities could not be conducted. The Institute has maintained an on-going dialogue with participating school districts and agencies to give focus to the research questions and issues that we address as an Institute. We see this dialogue as a means of reducing the gap between research and practice. This communication also allows us to design procedures that: (a) protect the LD adolescent or young adult, (b) disrupt the on-going program as little as possible, and (c) provide appropriate research data.

The majority of our research to this time has been conducted in public school settings in both Kansas and Missouri. School districts in Kansas which have or currently are participating in various studies include: Unified School District USD 384, Blue Valley; USD 500, Kansas City, Kansas; USD 469, Lansing; USD 497, Lawrence; USD 453, Leavenworth; USD 233, Olathe; USD 305, Salina; USD 450, Shawnee Heights; USD 512, Shawnee Mission; USD 464, Tonganoxie; USD 202, Turner; and USD 501, Topeka. Studies are also being conducted in several school districts in Missouri, including Center School District, Kansas City, Missouri; the New School for Human Education, Kansas City, Missouri; the Kansas City, Missouri School District; the Raytown, Missouri School District; and the School District of St. Joseph, St. Joseph, Missouri. Other participating districts include: Delta County, Colorado School District; Montrose County, Colorado School District; Elkhart Community Schools, Elkhart, Indiana; and Beaverton School District, Beaverton, Oregon. Many Child Service Demonstration Centers throughout the country have also contributed to our efforts.

Agencies currently participating in research in the juvenile justice system are the Overland Park, Kansas Youth Diversion Project, and the Douglas, Johnson, Leavenworth, and Sedgwick County, Kansas Juvenile Courts. Other agencies which have participated in out-of-school studies are: Penn House and Achievement Place of Lawrence, Kansas; Kansas State Industrial Reformatory, Hutchinson, Kansas; the U. S. Military; and Job Corps. Numerous employers in the public and private sector have also aided us with studies in employment.

While the agencies mentioned above allowed us to contact individuals and support our efforts, the cooperation of those individuals--LD adolescents and young adults; parents; professionals in education, the criminal justice system, the business community, and the military--have provided the valuable data for our research. This information will assist us in our research endeavors that have the potential of yielding greatest payoff for interventions with the LD adolescent and young adult.
Recently, applied psychologists and educators have begun to address such critical social problems as the unemployment and underemployment of youths, minorities, the handicapped, and disadvantaged persons. The learning disabled (LD) population is among the groups encountering such employment problems. Recent research has shown that LD adolescents perform tasks related to obtaining jobs significantly less efficiently than their non-LD peers (Mathews, Whang, & Fawcett, 1980). Specifically, in a study comparing LD to non-LD (NLD) high school students on a variety of nonsocial skills (e.g., writing a letter requesting an interview, writing a followup letter after an interview), the LD adolescents performed an average of only 20% of the skills correctly whereas their NLD peers performed an average of 57% correctly. In addition, they performed significantly fewer skills in a job interview situation than did their NLD peers (34% vs. 41%). Other researchers (e.g., White, Schumaker, Warner, Alley, & Deshler, 1980) have found that LD young adults were employed in lower status jobs and were significantly less satisfied with their employment situations after high school than were a random sample of their peers. These results indicate that LD individuals demonstrate deficits which may result in difficulties in obtaining jobs of equal status as those of their peers and which may, in turn, be reflected in less satisfaction with the jobs they do obtain.

Approaches used thus far with other populations in an attempt to improve their employment situations have included the use of contingency management techniques to promote job finding (e.g., Jones & Azrin, 1973), educational
techniques to teach job interview skills (e.g., Hollandsworth, Glazeski, & Dressel, 1978), and combinations of instructional and contingency management methods to enhance employability (Azrin & Philip, 1979). The modes of instruction have also varied, e.g., the use of instruction for individual job seekers (e.g., Furman, Geller, Simon, & Kelly, 1979), group-assisted programs (e.g., Azrin, Flores, & Kaplan, 1975), and workshop training procedures (e.g., Wilkinson & Rosenberg, 1979).

The majority of existing studies on approaches to job finding have been designed to analyze the effects of various training procedures on participants' performance in the job interview (Barbee & Keil, 1973; Braukmann, Maloney, Fixsen, Phillips, & Wolf, 1974; Furman et al., 1979; Hollandsworth, Dressel, & Stevens, 1977; Hollandsworth et al., 1978; Kelly, Laughlin, Clairborn, & Patterson, 1979; Kelly, Wildman, & Berler, 1980). However, the skills involved in obtaining a job interview are also important (Azrin & Philip, 1979; Mathews, Whang, & Fawcett, in press), since employers often receive over 100 applications for a single advertised position. One such skill involves the completion of application materials.

The quality of the job hunter's application materials often has a direct effect on his/her opportunity to interview for a specific job (Field & Holley, 1976). The application materials used by employers to decide who to interview most often include an employment application form and, occasionally, a resume. The content, completeness, neatness, and legibility of these application materials can have the effect of making one applicant stand out as superior, regardless of otherwise equal qualifications (Dipboye, Wibach, & Fromkin, 1975). Clark, Boyd, and Macrae (1975) and Hall, Sheldon-Wildgen, and Sherman (1980) have taught retarded subjects to complete certain biographical information on an employment application form, but no research has been conducted to promote such skills in the LD population at the level of complexity required by the jobs
for which these individuals might qualify.

The present study was designed to analyze the effectiveness of a set of instructional materials designed to teach LD adolescents the skills involved in completing a wide range of actual employment applications and in writing a resume that communicates effectively the job applicant's skills. In addition, the study employed social validation techniques to analyze the effects of such training on employers' ratings of the quality of the applicants' application materials, the appearance of the application materials, the applicants' qualifications, and whether or not the employer would invite the applicant to participate in a job interview.

Methodology

Subjects and Setting

Three learning disabled high school students served as trainees. All participants lived in a mid-western city of 60,000 that has one senior high school with an enrollment of approximately 1,800 students. Each participant was informed of the purposes of the research and consented to participate. For their participation, each student received a thirty-dollar incentive payment at the completion of the study.

The participants had been identified by high school personnel as learning disabled and were enrolled in at least one credit hour in the high school's learning center classroom. The first trainee, Jim, was a 19-year-old senior who had held three different part-time jobs over the previous four years. Mary, the second trainee, was a 19-year-old senior who had held four different part-time jobs in the previous three years. The third trainee, Tom, was an 18-year-old senior who had held three different part-time jobs over the previous four years. On the WAIS, verbal scores for the three subjects ranged from 83 to 90, from 99 to 103 on performance, with Full Scale WAIS scores ranging from 91 to 96. On the Woodcock-Johnson Psycho-Educational Battery, grade level scores
for the reading cluster were 2.6, 4.9, and 3.3, respectively, for Jim, Mary, and Tom; on the math cluster, scores were 7.0, 6.3, and 5.7, respectively. Finally, written grade level scores for the three subjects were 2.8, 5.1, and 2.5, respectively.

Training in the skills involved in completing applications and writing resumés was conducted after school or on weekends at a location convenient to the participant. Such settings included the student's home, the school library, the learning center classroom, and the public library. The participants completed pre- and post-training applications and resumés at home, independent from the researchers.

**Measurement Systems**

Application completion skills were observed in response to a request by the experimenters for participant to complete an employment application. During the course of the study, each participant was provided with 12 different employment applications obtained from 12 different local employers. The employers represented a variety of job situations commonly sought by youths. Table 1 lists the employment applications completed by the youths. Each application required a different number of responses with a mean of 75 responses (ranging from 45 to 104). Common types of requested information included personal demographics, employment history, educational background, and references. Each item of information provided by the trainee, was scored by the experimenters. For an item to be scored as correct the response must be: accurate, appropriate for the question asked on the application form, legible, spelled correctly, and fit into the space provided. If any of these criteria was not fulfilled, the item was scored as a nonoccurrence. The order in which applications were presented for completion was randomly assigned before the study. Each trainee was presented each of the 12 applications in the same order.
Resume writing behaviors were drawn from an extensive review of the literature of resume writing (e.g., Byrd & Moracco, 1979; Dipboye et al., 1975; Field & Holley, 1976; Gootnick, 1974; Hakel, Dobmeyer, & Dunnette, 1970; Hakel, Ohnesorge & Dunnette, 1970; Stimac, 1976; Wilkinson & Rosenberg, 1979) and an analysis of good and bad resumes. Resume writing skills were observed in response to a request by the researchers for the participant to write a resume. Table 2 shows the 32 resume writing items that were scored as being present or absent on the resumes completed by the trainees. Each item was scored independently without regard to order.

Two independent observers used checklists to score the occurrence or non-occurrence of each application or resume item on the permanent products. Item-by-item reliability averaged 85% (ranging from 78% to 90%) for application completion. Item-by-item reliability averaged 93% (ranging from 89% to 100%) for resume writing.

Training in Application Completion and Resume Writing

All instructional materials (see Footnote 1) were designed in a format consisting of detailed written specifications for the behaviors, examples of appropriate task performance, and rationales for each task (Fawcett & Fletcher, 1977; Fawcett, Fletcher, & Mathews, 1980; Fawcett, Mathews, Fletcher, Morrow, & Stokes, 1976).

A standardized training sequence (Mathews & Fawcett, 1977) was employed. This involved having each trainee read a set of written materials containing behavioral specifications, examples, and rationales. Each trainee required an average of 2.5 hours of instructor time to complete the entire training
sequence. This involved time in helping the participant read the written materials, answering any specific questions the participant might have, and practicing the skill until mastery was attained. Following the reading, the behaviors were practiced using a set of application materials. Feedback was provided by an experimenter based on the accuracy of performance in the practice situations; additional practice was provided as necessary to achieve mastery. This procedure was successively followed for the learning units on "completing the personal data sheet," "completing an application," and "writing a résumé."

Experimental Design

Application completion. The effects of the training procedures on application completion performance was analyzed using a multiple-baseline design across the three trainees. The experimental design consisted of baseline and training conditions. In each of the first three sessions (Baseline Condition), the trainees were presented a different employment application and were asked to complete it as if they were actually applying for a job. After completion of the third application, the first trainee received training (Training Condition). The other trainees remained in the baseline condition and continued completing applications for employment. The training was similarly administered after the sixth session of baseline to the second trainee and after the ninth session of baseline to the third trainee.

Resume completion. The effects of training on the completion of résumés was analyzed using a pre- and post-training test of résumé completion skills for each youth. During the Baseline Condition, each participant was given a written description of a resume and was asked to write a personal résumé. The written description stated: "A résumé is a short written history of your life. Most résumés simply give a history of the job seeker's job history, educational
background, and personal history. This information should be given to each employer before an interview and attached to any application for employment. Please make out a résumé of your experience." Each participant was given as many days as needed to write a résumé and was informed that s/he should consult anyone who might be helpful in preparing the résumé. The Training Condition occurred at the same time that training in application completion was occurring.

**Posttraining.** After training was complete (i.e., a trainee achieved mastery on practice materials) the trainee was given the résumé task again and was asked to complete some applications at home. The first trainee completed nine applications in this condition, the second trainee completed six, and the third trainee completed three.

**Employer Ratings of Performance**

To determine the qualitative differences of any changes in the trainees' résumé writing behaviors and application completion skills, employers were asked to rate the quality of the application materials completed by each trainee (Kazdin, 1977; Van Houten, 1979; Wolf, 1978). The personnel manager, store manager, or owner of each of the businesses that had provided an employment application used in the study was contacted after completion of the study. Each employer was provided with three sets of application materials completed for his/her business (one from each trainee). Thus, Employer 1 rated three sets of baseline application materials, while Employer 7 rated one set of baseline materials and two posttraining sets of materials. None of the employers was informed of any of the applicants' training status.

Each employer was asked to read through a set of application materials, i.e., the application and the trainee's résumé and to answer the following questions: "How satisfied are you with the content of the materials turned in by this applicant?"; and "How satisfied are you with the appearance of this application?" Ratings were completed on a five point scale (0, 1, 2, 3, and 4).
in which zero was "not satisfied" and four was "very satisfied."

The employers were also asked the question: "Based on these application materials, if you had a position open, would you invite this person in for an interview?" Each employer answered this question with either "yes" or "no" for each applicant.

Results

Trainee Performance

Figure 1 shows the effects of the training procedures on the percentage of employment application items completed correctly by each of the three trainees. For Jim, the first trainee, training resulted in an increase from a pretraining mean of 39% of the application items completed correctly to a posttraining mean of 91%. Mary demonstrated an increase from a pretraining mean of 36% to a posttraining mean of 93%. The third trainee, Tom, averaged 34% during baseline and 95% after training on how to complete an application. Thus, the percentage of employment application items completed correctly was markedly higher after than before training for each of the trainees. The increased performance coincided with the implementation of training in each case.

The effects of training on the percentage of occurrence of specified resume writing behaviors for each of the three trainees were also observed. Jim performed 32% of the specified resume writing behaviors on his baseline resume compared to 100% after training. On the baseline resume Mary performed 4% of the specified behaviors, while she performed 100% of the behaviors on the posttraining resume. Tom performed 11% of the resume writing behaviors during baseline and 96% after training. Thus, the performance of the specified resume
writing behaviors was higher after than before training for each trainee.

**Employer Ratings**

Figure 2 shows the effects of the training in resume writing and application completion on the ratings of potential employers as to whether or not to invite in for a job interview. For Jim, the first trainee, one of the three employers (33%) who viewed Jim's baseline application materials stated that s/he would invite Jim to participate in a job interview if a position was currently open. Following training, eight of the nine employers (89%) who viewed his application materials stated that they would invite him in for an interview. The same set of employers rated Mary's application materials. Of the six employers reviewing her pretraining materials, one (17%) stated that she would invite Mary to participate in a job interview; 100% of the six employers who viewed her posttraining materials stated that they would invite her for an interview. Tom's baseline application materials were rated by two of the nine employers (22%) who would have invited him to participate in an interview, while 100% of the three employers who viewed his posttraining materials stated that they would invite him to an interview. Thus, the employers' ratings suggest that all participants would be more likely to receive invitations for job interviews after training than before training in the application-related skills.

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Insert Figure 2 about here

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Each potential employer also rated his/her satisfaction with regard to the applicant's qualifications for the job, the quality and the appearance of the application materials. The data showed an increase in potential employers' satisfaction with the applicants, qualifications from a baseline mean of 53% satisfied (See Footnote 2) to a posttraining mean of 72% satisfied. The employers'
ratings of the quality of the content of the materials increased from a baseline mean of 53% satisfied to a posttraining mean of 89% satisfied. In addition, the employers rated their satisfaction with the appearance of the application materials as 36% satisfied during baseline and 75% satisfied after training. Thus, for all rated measures, the employers’ ratings of satisfaction with the quality of the materials increased following training for each of the participants.

Discussion

The results suggest that the training procedures employed in this study were effective in teaching resume writing and employment application skills to learning disabled adolescents. The employers’ rating data suggest that training was effective in improving the appearance and content of the application materials provided to the employers. In addition, these employers viewed the applicants as better qualified for employment after training and stated that they were more likely to invite the applicants to participate in a job interview after the training than before. These findings have important implications for educators of learning disabled youths. They suggest that LD adolescents, a group of individuals with severe deficits in the writing realm (e.g., Moran, 1981; Warner, Alley, Deshler, & Schumaker, 1980; Warner, Alley, Schumaker, Deshler & Clark, 1980) and specifically in the area of completing written employment materials (e.g., Mathews, Whang, & Fawcett, 1980) can be taught in a matter of a few hours skills that may result in interviews for jobs. These interviews may result subsequently in increased jobs options for the learning disabled person and in higher employment satisfaction.

Although the effectiveness of the procedures was demonstrated in this study, the willingness of potential users to adopt them was not established. Therefore, an attempt was made to determine whether programs whose goals include
improving their clients' employment potential would be willing to implement the present procedures. The directors of five local agencies were contacted: two career counseling programs, the CETA training program (U.S. Department of Labor), the high school's Learning Center, and an adult education program. The director of each program was provided with information concerning the amount of time required for training in resume writing and application completion (about 2.5 hours of instructor time), the cost of reproducing the training materials (about $1.00 per participant), and the effects of the treatment procedure (the data reported in this study). Each of these potential adopters was then asked: "Based on this information about the effects and costs of the procedures, would you be willing to adopt this training for use with your clients who are seeking employment?" All five directors contacted answered "yes"; they were willing to adopt the materials for use with their clients. Taken together, these findings suggest that the procedures are effective, inexpensive, and compatible with the needs and resources of potential adopters (Fawcett, Mathews, & Fletcher, 1980).

The present study was conducted with three learning disabled adolescents with minimal employment experience. An important topic for future research is the analysis of the effects of training in similar job-seeking skills with LD individuals of varied age, academic skills, and job experience. Such research would provide information on the generality of the effects of training to the LD population at large. In addition, future research might be conducted with LD persons currently seeking employment and focus on such outcome measures as the number of interviews received and the number of jobs offered. Results of such investigations will help clarify the generality of the effects of similar job-finding procedures to different populations and measures of success.
The development and analysis of effective job-training procedures is an important role for educators of learning disabled youth. This approach to providing job hunters with the skills needed to find employment appears to contribute to learning disabled youths' ability to obtain job interviews. Accordingly, the training may contribute to the capacities of youths and adults to apply reading, writing, and communication skills to common job-related situations (Roth, 1976). Such community education methods are consistent with an empowerment strategy designed to increase individuals' capacities for self-improvement and self-help.
References


Kazdin, A. E. Assessing the clinical or applied importance of behavior change through social validation. Behavior Modification, 1977, 1, 427-452.


FOOTNOTES

This research was supported, in part, by a grant from the U.S. Office of Education's Bureau of Education for the Handicapped (BEH #300-77-0494) to The University of Kansas Institute for Research in Learning Disabilities. We gratefully acknowledge the assistance of our colleagues at the Center for Public Affairs and the Institute for Research in Learning Disabilities at The University of Kansas. We are particularly indebted to Paula Whang, Stephanie Mathews, Kay Fletcher, Tom Seekins, Jean Schumaker, Russ Winn, Jerry Keimig, and Karen Lyerla.

1. Copies of these materials are available from R. M. Mathews, Psychology Department, University of Hawaii, Hilo, Hawaii 96720, at reproduction cost.

2. This method of computing a percentage score from rating data was developed by Don Bushell, Jr., in his work with S.C.A.L.E. (The School Clients' Annual Local Evaluation). The equation used to derive a percentage score was: n4 + n3 + n2 + n1 + n0 divided by the total number of raters times 4 equals % satisfaction.
<table>
<thead>
<tr>
<th>Title of Position</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stock Clerk</td>
<td>Gibson's Discount Center</td>
</tr>
<tr>
<td>2. General Laborer</td>
<td>Carol Lee Donuts</td>
</tr>
<tr>
<td>3. Counter Sales Clerk</td>
<td>Winchell's Donut House</td>
</tr>
<tr>
<td>4. Bus Person</td>
<td>Sambo's Restaurant</td>
</tr>
<tr>
<td>5. General Laborer</td>
<td>King Radio Corporation</td>
</tr>
<tr>
<td>6. Grocery Carry-Out</td>
<td>Hillcrest Food Center</td>
</tr>
<tr>
<td>7. Stock Clerk</td>
<td>T. G. &amp; Y. Department Store</td>
</tr>
<tr>
<td>8. File Clerk</td>
<td>U.S. Department of Agriculture</td>
</tr>
<tr>
<td>9. Greenhouse Worker</td>
<td>Pence's Greenhouse</td>
</tr>
<tr>
<td>10. Cashier</td>
<td>Dillons' Grocery Store</td>
</tr>
<tr>
<td>11. Sales Clerk</td>
<td>Otasco Hardware</td>
</tr>
</tbody>
</table>
TABLE 2
Resume Writing Skills

A. Content of the Resume

1. For a heading, write the word RESUME at the top of the page.

2. Include your:
   a. name
   b. complete home address below your name
   c. telephone number below your address
   d. social security number below your telephone number
   e. place of birth
   f. date of birth

3. Write a heading titled SKILLS SUMMARY
   a. list at least three general skills

4. Write a heading titled EXPERIENCE
   a. provide a brief, written description of each skill listed in the skills summary and an explanation of how you gained that experience

5. Write a heading titled PERSONAL BACKGROUND AND SPECIAL INTERESTS
   a. provide a brief, written description of your personal background and special interests

6. Write a heading titled EDUCATION. Include:
   a. the name of the last school that you attended (or that you are presently attending)
   b. the complete address of the school
   c. either the highest grade that you have completed, your graduation date, or your expected date of graduation

7. If appropriate, write a heading titled SPECIAL TRAINING
   a. provide a brief, written description of any special training that you have received

8. If appropriate, write a heading titled MILITARY RECORD. Include:
   a. a brief written description of your military record
   b. your highest rank
   c. where you were stationed
   d. what type of discharge you received
9. Write a heading titled either REFERENCES or PERSONS WHO CAN COMMENT ON MY CHARACTER AND RESPONSIBILITIES.

10. List three to five references. For each reference include:
   a. the person's full name
   b. the person's address and the telephone number
   c. the person's occupation
   d. a statement of how the person is associated with you
   e. a statement of how long the person has known you

B. Characteristics of the Resume

1. All written descriptions should be brief and use accurate sentence structure.

2. There should be no spelling errors.

3. The margins should be neat and at least 3/4" on all sides.

4. The resume should be typed such that it will produce a clean photocopy without lines, smudges, or crossed-out words.
FIGURE 1

PERCENTAGE OF EMPLOYMENT APPLICATION ITEMS CORRECTLY COMPLETED

Evaluation Session

Jim
Baseline
Posttraining

Mary

Tom
FIGURE 2

Based on these materials, would you invite this person in for a job interview? (Baseline vs. Posttraining)

Jim
- Yes
- No

Mary
- Yes
- No

Tom
- Yes
- No

Evaluation Session
FIGURE CAPTIONS

Figure 1. The percentage of employment application items completed correctly by each trainee. The vertical dotted lines indicate the point at which training occurred.

Figure 2. Employers' responses to the question, "Based on these materials, would you invite this person in for a job interview?" The vertical dotted lines indicate the point at which training occurred.