The Effect of Cognitive Instruction in the Development of Employment Interview Skills in Adolescents with Learning Disabilities

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Abstract

A series of six modules, *Pathways* was designed to facilitate career maturity in youth with learning disabilities. In each module, cognitive instruction was used to teach adolescents strategies and when to use these strategies. One of the modules, *Succeeding with the Interview*, prepares adolescents for employment interviews. This paper reports on a pilot study designed to evaluate the effectiveness of the module in teaching employment interview skills to four students with learning disabilities. Compared to two control groups, students who participated in the interview module showed changes on measures of behaviour, cognition, and metacognition.

Résumé

Une série de six unités d'instruction, "Pathways" était destinée à faciliter la maturation du choix de carrière parmis les jeunes en troubles d'apprentissage. Dans chaque unité, l'instruction cognitive était utilisée à enseigner aux adolescent(e)s des stratégies et quand utiliser ces stratégies. Une de ces unités, Succès avec l'interview, prépare les adolescent(e)s pour des interviews d'emploi. Cette communication fait un rapport sur une étude-pilote destinée à évaluer l'efficacité de cette unité en enseignant des habiletés d'interview aux quatre étudiants en troubles d'apprentissage. Comparés aux deux groupes-contrôles, les étudiants qui ont participé à cette unité des interviews ont changé en mesure de conduite, de cognition, et de métacognition.

This study is built on recent research in cognitive instruction with learning disabled adolescents. Research has shown that students enhance their learning by becoming aware of their thinking as they read and solve problems (e.g., Hutchinson & Wong, 1992). Teachers and counsellors can promote this awareness by teaching students effective strategies and discussing cognitive and motivational characteristics of thinking (Campbell & Pharand, 1991; Paris & Winograd, 1990). The purpose of the present study was to evaluate the effectiveness of cognitive instruction in teaching employment interview skills to adolescents with learning disabilities.

THEORETICAL FRAMEWORK AND RELATED LITERATURE

Children and adolescents with learning disabilities often fail to access knowledge unless they are explicitly prompted to use specific cognitive strategies (Swanson, 1989). The goal of cognitive instruction is to teach adolescents these cognitive processes and when to use them (Pressley,

Symons, Snyder & Cariglia-Bull, 1989). To meet these goals of self-appraisal and self-regulation requires knowledge of the strategies, monitoring of the situation to select appropriate strategies, and appraisal of one's own execution of these strategies (Meichenbaum, 1986). Training in cognitive strategies like self-questioning has substantially improved performance in reading comprehension and mathematics problem-solving in learning disabled adolescents (Hutchinson & Wong, 1992). Deshler and his associates have developed instructional packages to promote the use of cognitive strategies in many academic areas (Schumaker, Deshler & Ellis, 1986).

Many youth with learning disabilities have demonstrated difficulties in the social domain (Bryan, 1990). They also have displayed social misperceptions leading to significant communication difficulties (Schneider & Yoshida, 1988). Learning disabled adults surveyed by Hoffman et al. (1987) reported social problems including talking or acting before thinking, shyness, lack of self-confidence, and frustration. Biller (1985, 1987) has shown that in adolescents with learning disabilities the development of career maturity is delayed. These problems could be expected to affect them in an interview and to interfere with their ability to obtain employment.

In the validation of an instrument to assess occupational skills, Mathews, Whang, and Fawcett (1980) reported that employers rated performance in a job interview highest of 13 job-related skills. In a later study, Mathews, Whang, and Fawcett (1982) found that the behaviour ratings of learning disabled adolescents on an employment interview were significantly lower than those of adolescents without learning disabilities.

Behaviour interventions such as Getting Employment Through Interview Training (GET IT!) (Roessler, Hinman & Lewis, 1984) have been developed to meet the need for a small-group intervention for adults with handicaps. GET-IT! was designed to improve self-presentation skills and non-verbal behaviours in the employment interview. Participants improved on discrete behaviours but not the overall impression made in an interview (Farley & Hinman, 1987). The outcome data demonstrated the limitations of behavioural training, and the need for cognitive interventions that emphasize understanding and maximize generalization (Deshler, Alley, Warner & Schumaker, 1981). There is clearly a need for instruction that prepares youth with learning disabilities to succeed in employment interviews, and helps them to use feedback about their performance to change the way they approach interviews. The present study was an initial investigation of the effectiveness of cognitive instruction in small-group counselling on performance during an interview, reflection about an interview (stimulated recall), and thinking about how to approach an interview (metacognitive interview).

METHOD

Subjects

Ten students from a secondary school in a mid-sized city in eastern Ontario participated: four in the intervention group, three as pretest-posttest controls, and three as posttest only controls. All students had been identified as learning disabled under the Ontario guidelines which include a significant discrepancy between ability and achievement, evidence of learning problems, and exclusion of other disabilites that could account for the learning difficulties (Ontario Ministry of Education, 1986). The students were receiving regular assistance in a learning disabilities resource program. The median age in the intervention and pre-post control groups was 17; the median age in the posttest only control group was 16. Three of the 10 subjects were females, two in the intervention group and one in the posttest control group.

Instructor

The first author, who was the resource teacher, instructed the group. She has 20 years teaching experience and specialist qualifications in counselling and special education.

Procedures

Assessments. Pretests and posttests were administered individually to all students. The first pretest was a videotaped simulated job interview consisting of 13 questions. For example, the first question was, "Why did you apply for this job?" The sixth question was, "We have many qualified applicants for this job. Why do you think we should hire you?" Question 13 provided the interviewee with an opportunity to ask questions of the interviewer. A research associate who did not know the students interviewed each student indivdually, giving the instruction to treat this like a real job interview for a position as a counter person at a fast food store.

The second pretest was a stimulated recall task in which the videotape of the interview was stopped at five key points and the student asked to recall what they were thinking at that point during the interview. The third pretest consisted of an 11-question metacognitive interview about how the student thought a person should behave, speak, and think during an interview. For example, students were asked about what they should do to make a good impression, and about what they would say when asked the reason for leaving a job from which they had been fired. Posttests were administered in an identical manner to the pretests.

Scoring. The mock interviews were scorerd with a behaviour checklist of 10 items including: uses the interviewer's title and last name, does not fidget, and asks questions of the interviewer. Interrater agreement on the behaviour checklist for the 10 items was 96% for two scorers familiar with

the module. In addition, the mock interviews were scored on 11 holistic criteria including elaboration of responses, self-confidence, and overall impression. Each item was rated on a five-point scale wherein 1 was poor, 5 was excellent. Two raters familiar with the module had interrater agreement correlations ranging from .51 to .88 on the 11 criteria. Interrater reliabiltiy for the total score was .78.

A qualitative content analysis was carried out on the stimulated recall transcripts. Responses to the 11-item metacognitive interview were scored for thoroughness and accuracy of understanding of interview skills on a scale of 0 to 2. Interrater agreement for two raters familiar with the module was 98.5%. copies of the measures and detailed scoring criteria for all measures are available from the authors.

Intervention. Nine sessions were conducted twice weekly in fall 1990. Scripts were used to guide the instruction. Each session began with a review of the self-questions and cues generated in the previous session. The teacher used clear explanations, modelling. Thinking aloud, and self-questioning to teach the students strategies for monitoring, recognizing, and enhancing their interview performance. The students practised interviews with partners, and generated personal cues and self-questions. Discussions focused on self-assessment and feedback to members of the group.

The first session introduced the instructional module. After viewing negative and positive interview beginnings, students generated self-cues for appearance and behaviour and practised an interview with a partner. The second session consisted of reviewing cues, producing cue cards, analyzing behaviour in brief videotaped interviews, and practising answering interview questions in the group.

In session three, the teacher and students modelled effective answers to common interview questions. The students practised in pairs and prepared interview guidelines in group discussion. These guidelines were reviewed in session four and students practised using the guidelines in an interview in which the partner assumed an unfamiliar name. Session five consisted of videotaping interviews with partner and self-assessment of interviews. In session six the group reviewed and discussed the videotapes and generated new self-questions based on the videotaped feedback.

Session seven focused on three aspects of the interview: using the modified self-questions to guide answers to questions, explaining one's learning disability to an interviewer, and generating questions to ask of the interviewer. Each aspect was practised with a partner. In session eight a review of appropriate endings to interviews was followed by videotaping of interviews with partners. In session nine students participated in self-assessment, group feedback of videotaped interviews and an informal evaluation of the module.

RESULTS

Three kinds of data were collected in this study—measures of behaviour, cognition and metacognition.

Behavioural Measures

Mock Interview Behaviour Checklist. The behaviour checklist results indicate that two intervention subjects (students 2 and 3) made large gains. Student 3 scored 10 out of 10 on the posttest. Pretest averages were similar, 4.3 for the intervention group and 4.7 for pre-post control. At posttest, the intervention group had the highest score, 7.5 of a possible 10, while the pre-post control demonstrated a slight increase to 5.7, suggesting that they may have learned some appropriate behaviours from participating in the pretests. The posttest-only group demonstrated similar scores to the other two groups at pretest.

For the intervention group, change was most apparent on two nonverbal behaviours, refraining from fidgeting (item 5) and keeping hands away from face (item 6). On the posttest all intervention students kept their hands away from their faces and only one fidgeted. On the pretest all intervention students showed both behaviours. For the intervention group, the verbal behaviour that showed most change from pretest to posttest was asking questions of the interviewer (item 7). None of the intervention students questioned the interviewer on the pretest and all four did on the posttest. The most difficult behaviour for the students was using the interviewer's name (item 1). Only one student, in the intervention group, used the interviewer's name at any time. The behaviour checklist data suggest that the intervention group increased appropriate behaviours and decreased inappropriate behaviours from pretest to posttest.

Mock Interview Holistic Scoring. The holistic ratings provided data about behaviour at a more integrated level, such as attentiveness to interveiwer, rather than discrete behaviours. The average scores of the three groups taking the mock interview for the first time were similar, 26.3 (pretest for intervention), 24.6 (pretest for pre-posttest control), and 25.3 (posttest only control). The average posttest score for the intervention group was 44.5 out of a possible 55. The posttest average of the control group that had received the pretest, 29.3, fell between the other scores. Students 2 and 3 in the intervention group had the highest scores on the posttest and on 5 of the 11 characteristics, the total for the 4 intervention students was 18 or greater out of a possible 20. These characteristics were attentiveness to interviewer, elaboration of responses, appropriateness of response, positiveness of tone, and initiative shown. The overall impression that the intervention students made at the posttest was positive.

Metacognitive Measure

The pattern of scores on the metacognitive interview was similar to that for the behavioural measures. The means for the three first time administrations were similar, 10.8 for the intervention group, 10.0 for the pre-post control group, and 9.3 for the posttest only control group. The intervention group had the highest mean on the posttest, 16.8 (out of a possible 22), however the pre-post control group showed a slight decline to a mean of 7.7 on the posttest. The only question on the posttest about which all the intervention students had difficulty reflecting was "What should you say when an employer asks you why you applied for that job?" On every other posttest question, intervention students scored 2, indicating a thorough, thoughtful respsonse or 1, showing some awareness of the ways in which one should approach an employment interview.

Cognitive Measure

A stimulated recall measure was used as an indicator of the student's knowledge and cognitive processing during the interview. Glaser (1990) argued that researchers ought to experiment with measurement procedures responsive to the structures and processes that develop as individuals move from beginning to advanced learners. As competence in a domain grows, the knowledge base increasingly is characterized by (a) coherence of knowledge, (b) principled problem solving, (c) usable knowledge, and (d) self-regulatory skills (Chi, Glaser & Farr, 1988; Glaser, 1990, p. 477). For each of these characteristics, a brief qualitative analysis of the stimulated recall data reveals superiority of posttest performance by subjects in the intervention group. Brief representative examples of the strength of the intervention students in each of these four areas are given.

Knowledge coherence. An example of more coherence of knowledge on the posttest than on the pretest is provided by intervention student two. On the posttest, she stated, "I was trying to make it sound as positive as can be and the part about my classes I dislike, I wanted to turn it around like reasons why I dislike them." On the pretest, she answered, "I don't know. Just, I was thinking of the answers but also why you should need that information." Her response can be contrasted to the pre-posttest control student five, who responded on the posttest that, "I couldn't really think of, uh, much to say about, uh, like about school. I like school and everything but I don't know I just went blank there."

Problem solving. The intervention subjects generally showed greater attention to problem solving in their posttest responses. Intervention student four considered which jobs to talk about on both the pretest and the posttest. However, he showed more principled problem solving on the posttest through better understanding of his dilemma. On the pretest, he said, "Which one should I talk about?" On the posttest, this

student said, "Should I include the paper route or should I just go straight to payroll jobs?" Pre-posttest control student seven showed no such development in his thinking about a problem associated with his previous jobs. On the pretest, he replied, "I hope he doesn't phone and find out how many jobs I've lost in the last year and a half." On the posttest, he said, "God, I hope he doesn't phone any of my bosses."

Usable knowledge. Intervention student one, when asked what she was thinking when she walked in and during the first question of the posttest, replied, "I totally forgot about waiting for you to tell me to [sit down]." She realized she had forgotten to use what she knew. This student showed no usable knowledge on the pretest at this point with her answer, "I was nervous cuz I didn't know what to say." Pre-posttest control student six showed no such change in usable knowledge. On the pretest, he said, "Scared that, and I didn't know what to be expected of me." The posttest response was different but was not more knowledgeable, namely, "That I hope to get the job." Posttest only control student ten's answer was "I really didn't know what this was."

Self-regulatory skills. An example of improvement in self-regulatory skills was intervention student three. When asked how he thought he had done on the posttest mock interview, he replied, "I did all right. Not great, too great. . . . I had good eye contact and didn't fidget like I usually did before and I thought those two were the biggest improvements on my part. And as well as 'yeah.' I didn't say them often but I did say them." This can be compared to this student's self-regulation on the pretest. "I thought, well I thought I had given an all right interview. It wasn't the best because of the, yeah, choppiness and thinking how you're gonna do it and so there's the 'ah's' and, like, not really knowing what to say." Although there was a change in the responses of pre-posttest control student six between the two tests, there was no apparent increase in self-regulatory skill. Indeed, his self-perceptions were higher than the independent raters' perceptions of his performance. On the pretest, he said, "That I might have a good chance of getting the job." On the posttest, where this subject was rated higher, he answered, "That I knew that somewhere down the line that I won't be getting the job."

Brief excerpts from the transcripts of the stimulated recalls indicate that on the posttest interviews the intervention subjects were using well-developed knowledge bases according to each of the four criteria.

DISCUSSION

This preliminary study was conducted to assess the feasibility of applying cognitive instruction to enhance the employment interview knowledge and skills of youth with learning disabilities. The data—behavioural, cognitive, and metacognitive—suggest that the students learned appropriate interview behaviours enhanced their knowledge about the inter-

view process, and their metacognitive awareness. The consistency among measures of discrete behaviours (e.g., fidgeting), more global behaviours (e.g., elaborating on answers), and metacognition suggest that sutdents understood what they were doing and why in the employment interview. The more integrated and useful knowledge bases of the intervention group at posttest suggest more than temporary behavioural change (Glaser, 1990). It is likely that including measures of maintenance and transfer in future studies with this instructional module would answer this question more adequately.

These preliminary data suggest some changes in behaviour also followed students' participation in the pretest interview and observation of the videotaped interview in the stimulated recall procedure without further instruction. However, no changes were apparent in their metcognitive interviews. Positive results in this study suggest that further research is warranted using this instructional module and these scoring procedures. Cognitive instruction shows promise in enhancing employability as it has enhanced academic knowledge.

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