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# Social Competence and Work Success of College Students with Learning Disabilities

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## Abstract

This study examined the relationship between social competence and work success in college students with learning disabilities (LD). A sample of college students with LD was rated on an index of social competence and then interviewed about their summer and part-time work experiences. Subjects with high ratings on social competence were more likely to have earned over \$6 per hour and to have worked on a non-hourly basis, and were less likely to have had difficulty finding a job. A subset of the sample with diagnosed Attention Deficit Hyperactivity Disorder was found to have low social competence and marginal work histories. Implications of the findings for support service planning are discussed.

## Introduction

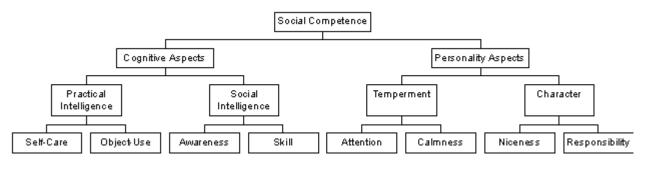
For many young people and their families the main purpose of a college education is to prepare them to succeed occupationally. A major question for those who run support programs for college students with learning disabilities (LD) centers upon whether the interventions that decrease the risk that such students will fail in college do anything to decrease the risk that they will fail occupationally. There are several reasons why we should be interested in this question: (1) there is a small but growing literature that indicates that adolescents with LD are more likely to have marginal and unsatisfactory work adjustments (Rourke, Young, Strang & Russell, 1986; White, Alley, Deshler, Schumaker, Warner & Clark, 1982); (2) there is an even bigger literature suggesting that adolescents with LD are more likely than non-LD adolescents to have deficits in social skills that are relevant to work success or failure (Bryan, 1977; Meyers & Messer, 1981; Rourke, 1989; Spreen, 1988); and (3) LD support programs tend to focus on academic

success, and do relatively little to prepare students more specifically for a successful transition to the world of work (Mangrum & Strichart, 1984; Vogel, 1987).

This study is a preliminary effort to validate an instrument for identifying which college students with LD may be at increased risk for occupational failure because of interpersonal skill deficits. Although students with LD, as a group, may be more likely to be socially incompetent, there is considerable variability in the level of social competence of students with LD. With the increased emphasis on sub-typing as a necessary prelude to design of intervention programs, it is of interest to determine whether level of social competence is a meaningful basis for screening those college students with LD who may need increased services aimed at helping them make the transition to employment.

The most valid approach to examining the relationship between social competence and work success of college students with LD would be to follow them into adulthood. Given the number of years needed to do that, however, we have chosen to use as a preliminary index of employment success the experiences that college students with LD have had in their summer jobs and in their part-time employment during the academic year. In this study, a sample of college students with LD was rated on a measure of social competence and then interviewed to gather information about their recent work experiences. It was hypothesized that students who scored low in social competence would give indications of problems in their college work experiences that might be predictive of later, more serious, problems in career development.

#### Figure 1.



#### Model Underlying the Social Competence Sub-Scale of the GCI.

## Method

# Subjects

The subjects were all students at a 4-year private university who were enrolled in an LD support program. Forty-five students were rated on the social competence scale of the General Competence Index (Greenspan, Gregory, Granfield, & Musheno,1989). Based on a median split, subjects were divided into a "High Social Competence" (Hi SC) and a "Low Social Competence" (Lo SC) group. Eighteen subjects (nine Hi SC, nine Lo SC) agreed to be interviewed about their recent employment experiences. The mean social

competence score for the nine Hi SC subjects was 96.1 (range:93-99)compared to a mean of 85.6 (range 74-90) for the nine Lo SC subjects.

The Hi SC group contained six males and three females, while the Lo SC group contained seven males and two females. The mean age of the Hi SC group was 19-11 (range: 18-10 to 21-3), while the mean age for the Lo SC group was 20-9 (range: 19-4 to 23-7). Wechsler Adult Intelligence Scale-Revised (WAIS-R) scores were available for most subjects. The mean Full Scale IQ for the two groups was essentially identical (99.6 for Hi SC, 100.6 for Lo SC). The mean Verbal IQ was five points higher for the Lo SC group (108.1 versus 102.8), while the mean Performance IQ was two points higher for the Hi SC group than for the Lo SC group (95.7 versus 93.4).

Information about educational and occupational backgrounds of subjects' parents showed the two groups to come from similar socioeconomic backgrounds. All subjects were white, and most came from relatively advantaged professional families.

# **General Competence Index**

The measure of social competence that was used is derived from a rating instrument known as the General Competence Index (GCI). The GCI was developed by the first author and his colleagues (Greenspan, Gregory, Granfield, & Musheno, 1989), based on a model of competence that had been developed over a period of years (Greenspan,1981). Raters (in this case staff persons in the college LD support program who knew the subjects well) are asked to rate students on a 5-point Likert scale, according to how competent they are on each of 64 items. Half of the items (32) tap an individual's "social competence" (practical intelligence, social intelligence, temperament and character), while the other half of the items tap his/her "instrumental" competence (physical state, motoric ability, sensory functioning, and language/cognition).

In this study, only the social competence sub-scale of the GCI was used (see Figure 1 for a detailed depiction of the model of social competence). In this study, a summary measure of social competence was obtained by summing the five-point ratings across all 32 social competence items. The GCI is filled out by raters who are asked to read the very detailed and self-explanatory directions, without receiving any training. One reliable study, utilizing a sample of mentally retarded adults, and utilizing Generalizability Analysis of Variance (Genova) produced a reliability coefficient of .66 (Gregory, 1989). A more recent reliability study, utilizing a high school sample of emotionally disturbed youth, produced a reliability coefficient (for the social competence component of the GCI) of .83 (Musheno & Greenspan, 1990). While there are no absolute guidelines concerning an acceptable Genova coefficient, this level is considered adequate for research purposes; however, it is recommended that at least two raters be used for any clinical purpose to which such an instrument might be put (Suen, Awrey, & Greenspan, in press).

Validation of the GCI is ongoing. Content validity was obtained by having expert judges rate the items according to their fit with descriptions of the major components of the

competence model. Concurrent validation thus far was provided in one study (Gregory, 1989) in which the social competence sub-scale of the GCI was found to be as good a predictor of work adjustment in adults with mild mental retardation as was the Vineland Adaptive Behavior Scale.

#### **Interview About Work Experience**

Telephone interviews were conducted with all of the 18 subjects. In these interviews, students were asked about their work experiences over a span of 3 years, plus the current summer (the interviews were conducted mid-summer). Subjects were asked to give their job titles, dates of employment, the nature of the work, hours worked per week, their highest hourly earnings, and any difficulties they may have had in keeping the job and in getting along with supervisors and co-workers. They were also asked whether the job was challenging, whether their learning disability interfered with their job performance, their reasons for leaving the job, and if any accommodations were made for their LD (for example, allowing an individual to work alone, allowing an individual to take longer to complete a task, etc.).

Finally, the following open-ended questions were asked: "Have you ever had difficulty finding a job?", "If so, what do you attribute the difficulty to?", "What are the most important things people need to do to hold a job?", "What do people need to do to get ahead in a job?" and "When people get fired, what do you think are the reasons?"

Demographic and other personal information was noted from subjects' records, including: age, parents' education and occupations, WAIS-R scores, the nature of their learning disability, and any known history of psychiatric difficulty.

## Results

## Level of Employment

Several analyses were undertaken to compare the level of employment of the students in the Hi and Lo SC groups. Salary was one such indicator, although mean salary level is a less than satisfactory index, as students were in multiple jobs for varying periods of time. It was decided to look at the percentages of students who, at one time or another, had earned an hourly equivalent rate of \$6 or more. In the Hi SC group, seven out of nine had met this criterion (eight out of nine, if one counted the tips earned by one student who worked in a restaurant). In the Lo SC group, however, only five out of nine subjects met this criterion (note: because of the small N, findings are presented descriptively, without any effort to use an appropriate statistic, such as chi-square).

Another way of looking at level of employment is in terms of whether a subject has ever worked on a non-hourly basis, for example on a fee-for-services, contractual, or commission basis. Using this rough index of "professionalism," we found that seven out of the nine Hi SC subjects had some experience with such a compensation arrangement, having worked in such roles as photographer, commission salesman and camp counselor, while only one of the nine Lo SC subjects had any such experience.

## **Difficulty in Finding Jobs**

Another indicator of employment success was whether or not the subjects had ever experienced difficulty in finding a summer job. Three of the Hi SC subjects reported difficulty, with two of those attributing it to poor timing: for example, as a result of having to attend summer school. Five of the nine Lo SC subjects, on the other hand, reported difficulty in finding a summer job, with none attributing it to timing problems. Two of the Lo SC subjects attributed their difficulties to motivational problems, as reflected in one statement that "I didn't feel like looking."

#### Ideas About Job Maintenance and Success

Preliminary analysis of the responses to questions about reasons why people succeed or fail in jobs revealed no differences between the two social competence groups. Both groups tended to rely on platitudes like "work harder than you have to," "show a good attitude," "be on time," etc. Relatively few comments were made by any subjects about the quality of the work performed (as opposed to the importance of conforming), and these were all made by members of the Hi SC group. The validity of the open-ended approach to assessing employment insight was brought into question by one comment (from the lowest-rated member of the Lo SC group): after providing socially desirable responses about the importance of punctuality and taking direction from supervisors, he volunteered the information that he regularly ignores both bits of advice.

## **Role of Attentional Disorders**

An interesting finding, although one not part of our initial focus, emerged from an examination of available data about subjects' psychiatric histories. It was found that the Lo SC subjects were quite a bit more likely to have been diagnosed or referred for possible diagnosis for Attention Deficit Hyperactivity Disorder (ADHD). Four out of the nine Lo SC subjects were evaluated for possible ADHD, with three so diagnosed (all three had been placed on attention-enhancing medications). In the Hi SC group, by contrast, only one of the subjects was ever referred for ADHD testing. Interestingly, this subject had the lowest social competence score in the Hi SC group, scoring only two points above the median for the total sample.

## Discussion

## **Research Implications**

The results of this study suggest that social competence level, as measured by the social competence scale of the GCI, may be a useful indicator of risk status for later employment difficulties in college students who have learning disabilities. In their recent summer and part-time academic year employment experiences, the Hi SC subjects were

more likely to have earned over \$6 per hour and to have worked on a non-hourly basis, and were less likely to have experienced difficulty in finding a job. There were no apparent differences in the responses to open-ended questions about how to keep and succeed in a job, although there is reason to think that a more valid approach to tapping such knowledge might have been to present hypothetical problem situations and ask for possible solutions, rather than to solicit platitudinous responses to open-ended questions.

Inferences about the risk status of the Lo SC subjects in this study are based on the assumption that difficulty or failure in summer employment may be indicative of later difficulty in post-college career-building efforts. This is an unproven assumption, although one that is reasonable to adopt. Clearly, a stronger case could be made for the validity of the GCI if these subjects were followed up for several years, and their post-college employment experiences examined.

This study indicates, quite clearly, that there is variability in the level of social competence found in college students enrolled in an LD support program. There was a negative skew in the social competence scores, such that the majority of subjects were grouped at the high end, with the major variability consisting of a few extreme outliers at the low end. This suggests that the GCI may be useful as a screening device, with action (such as counseling, psychological evaluation, social skill training, and vocational rehabilitation referral) considered routinely mainly for those students who evidence very low social competence scores.

Although this study lacked sufficient sample size to undertake a fine-grained analysis of the contribution of particular components of social competence to work experience, the finding of a higher incidence of possible ADHD among the Lo SC group is of particular interest. It is significant that the three confirmed ADHD subjects in the Lo SC group also received the three lowest social competence scores of the total sample, with two of these scoring almost 20 points lower than the highest subjects in the Lo SC group. These three subjects also had very marginal employment histories (i.e., held a job in college typically held by high school students and maintained jobs through the intervention of parents), and appeared to be especially at risk for later employment problems.

The IQ data, while not a central focus of this study, provided some interesting findings. The fact that the Full Scale IQs were equivalent in the two social competence groups suggests that (at least for this sample) the employment risk status of the Lo SC subjects was a function of factors other than IQ. In fact, the Verbal IQ scores (perhaps most related to purely academic success) were actually higher in the Lo SC group. In sum, the study lends some support to the notion that a segment of the LD college population maybe more at risk than others for later problems in the area of career success. The interpersonal incompetence needs further exploration as the possible central factor in creating this increased risk. In this regard, students with LD are probably no different than students with other types of disabilities (or no identified disability) who may lack employment readiness because of social skill deficits. Services aimed at increasing employability, while desirable for all students who may need them, are particularly

advisable for students who are both LD and socially incompetent, because of their increased risk of failure in life challenges after college.

#### **Practical Implications**

In developing services for students with LD who are experiencing social and/or job difficulties, existing support services first need to be identified and utilized. Collaboration needs to be developed between LD specialists and vocational specialists such as career counselors and cooperative education program staff. When students with LD do not qualify for cooperative education programs, modifications may be needed, or alternative fee-based programs designed. Additionally, collaboration should be fostered with State Departments of Rehabilitation Services to offer individuals vocational training and support during their college careers. Finally, collaboration between LD specialists and counseling and mental health professionals is critical to more expertly address ongoing social and emotional difficulties. Collaborative projects might involve peer support groups, job skill workshops, and supervised practicum experiences. Topics, objectives, and activities will vary depending on individual student needs; however, because the most successful job strategy often involves "selecting a job that rewards and utilizes assets and minimizes areas of deficiency" (Kokaska & Skolnik, 1986, p. 515), selfassessment and job exploration are critical elements of transition programs. Discussions of the distinction between vocation and avocation might encourage some individuals to more realistically consider pursuing fulfillment through hobbies and/or family and community activities rather than through their jobs. For others, exploration of selfemployment options might be appropriate, as in the innovative Venture Project initiated by the Washington Coalition for Citizens with Disabilities (Haring & McCormick, 1990). Rather than focusing on how to be a good employee, this project helps individuals to clarify their resources and abilities, and to develop skills and systems for selfemployment.

In support groups, inappropriate interpersonal behaviors might be identified and addressed using modifications of the awareness building and self-management techniques proposed by Fagen, Long and Stevens (1975) and Goldstein, Sprafkin, Gershaw and Klein(1980). Opportunities for interview rehearsing, self-advocacy practice and collaborative problem-solving also need to be made available to students (Siperstein,1988). Alumni and/ or other adults with LD (in particular, ADHD) could be invited to speak about their job experiences and to serve as mentors (Schumaker, Hazel & Deshler,1985). Alumni networks and evening follow-up groups could further provide opportunity to develop job maintenance and promotion skills (Michaels,1989).

Hopefully, interventions such as those described above will serve to increase the likelihood that college students with LD who have significant interpersonal difficulties will make a more successful adaptation to work and, consequently, to adult life. It should be kept in mind, however, that even with the best and most conscientious interventions, some college students with LD face a future of long-term dependence on adult disability service systems.

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