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A Self-Evaluation Instrument for Work Performance and Support Needs

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Involvement of students and adult employees into the decisions that affect their education and employment can improve their transition into supported employment. One means for increasing involvement into these decisions is to gain their input into performance evaluations and support needs. The *Job Observation and Behavior Scale: Opportunity for Self-Determination* is an assessment designed to obtain such input from the perspective of students preparing for, and employees participating in, supported employment. This article presents the role of the scale in obtaining student and employee input into their own work performance and support needs; it summarizes the development and technical properties of the instrument; and it describes how this instrument can promote the self-determination of students and adult employees with disabilities.

Keywords: supported employment; employment assessment; self-evaluation; Job Observation Behavior Scale

For most Americans, work is central to the roles that they hold in their communities and within their families. Because most people spend one third of each day working for two thirds of their lives, work represents a significant component of how individuals define themselves, and it is a high priority in an individual's life (Bullis, Nishioka-Evans, Fredericks, & Davis, 1993; Grossi, Schaaf, Steigerwald, & Mank, 2002; Kronick, 1981). In addition to providing personal benefits (e.g., increased life satisfaction, self-confidence, and direction) employment offers the practical opportunity of contributing toward one's own financial independence, which in turn results in a decreased reliance on families, taxpayers, and others for economic support (Griffin, Rosenberg, Cheyney, & Greenberg, 1996; Rosenberg, Cheyney, & Greenberg, 1991; Skinner, 2003).

Employment success as an adult has developmental roots. Work patterns that lead to employment success are learned early in life and so include work behaviors and dispositions central to work adjustment (e.g., following directions, getting along with others, showing initiative, taking pride in one's work, being prompt). These work and social behavior patterns have long been linked to successful employment (Kolstoe, 1961; Warren, 1961) and identified as *critical vocational behaviors* (Krantz,

1971) needed to obtain and maintain employment. During the last two decades, tremendous progress has been made in establishing a body of best practice that promotes the development of critical vocational behaviors. One area of progress is the spread of multiple models of supported employment (Rogan, Banks, & Howard, 2000; Rusch & Hughes, 1989; Wehman, 1996). A second area includes the growing body of practical adaptation strategies designed for individual students and employees (Brady & Rosenberg, 2002b; Nisbet & Callahan, 1987; Storey, Rhodes, Sandow, Loewinger, & Petherbridge, 1991; Taylor, Richards, & Brady, 2005). These adaptations frequently include using modified materials, restructuring complex jobs into single tasks, using direct instruction, promoting systems of self-management, and adding natural supports. This combination of alternative work models and individual supports has reflected a concerted effort in bringing people with disabilities into the employment mainstream (Stodden, 1998; Taylor et al., 2005; Wehman, 1988).

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In addition to these adaptation strategies, a personal system of support involves bringing students and adult employees into a person-centered planning process consistent with rehabilitation and employment (Kim & Morningstar, 2005; Menchetti & Garcia, 2003). By participating in a planning process that affects transition and employment (Martin et al., 2006), students and adults have input over many decisions that affect, for instance, jobs and work tasks that they might perform, work and social supports that would help them work productively, and current and future employment programs in which they might participate. Person-centered transition planning is a benchmark for secondary students and adults who are entering supported employment. In general, supported employment is competitive work in integrated work settings for individuals with disabilities, and it includes ongoing support of the individual. Similar to legislation mandating employment variables, legislation has also mandated consumer input for accreditation agency reviews (e.g., Commission for the Accreditation of Rehabilitation Facilities), rehabilitation law (Individualized Written Rehabilitation Plan requirements), and special education law (transitional Individualized Education Programs; Hamilton & Shumate, 2005; Martin et al., 2006).

Opportunities for self-determination are an important aspect of person-centered planning (Thoma, Williams, & Davis, 2005; Wehmeyer, Agran, & Hughes, 1998). To be self-determined, individuals need to possess the abilities to make informed choices (Karlsson & Nilholm, 2006). There are numerous models of self-determination among educational, rehabilitation, and employment professionals (Martin & Huber Marshall, 1996; Mithaug, Wehmeyer, Agran, Martin, & Palmer, 1998; Smith, 2003); however, most models include self-knowledge and awareness; self-efficacy, appreciation, and advocacy; self-management, performance, and adjustment; self-monitoring and evaluation; and meaningful participation in planning and decision making.

Research on self-determination indicates a positive link to postschool employment outcomes when individuals have opportunities to express employment preferences, select jobs that match these preferences, advocate for their employment choices, and provide substantive input over the supports they need to succeed in work routines. These outcomes include a much higher degree of work and life satisfaction, higher performance ratings by their job supervisors, increase wages, and reduced job loss (Abrams, DonAroma, & Karan, 1997; Menchetti & Garcia, 2003; Smith, 2003; Wehmeyer & Schwartz, 1997). Education, employment, and rehabilitation professionals increasingly expect that vocational training

programs for students and adults will include opportunities for self-determination (Hamilton & Shumate, 2005; Taylor et al., 2005). Ironically, many teachers and employment specialists lack the information and skills necessary to assess students' and employees' current levels of self-determination or plan meaningful interventions to promote these important skills (Agran, Snow, & Swaner, 1999; Carter, Lane, Pierson, & Glaeser, 2006).

As important as self-determination is, the assessment of this construct has generally been limited to understanding self-determination as a psychosocial construct or to establishing instructional goals for personal growth and development (Thoma et al., 2005; Wehmeyer et al., 1998). To date, assessments of students' and employees' self-determination have not been directly linked to demonstrated work performance and employment support needs. For students and adults in the community workforce, self-determination assessment must yield information about two important and interrelated employment variables: actual work performance as a function of the type of support received by the student or adult employee. Gaining direct input on the performance and support needs of students and employees could be valuable in making employment decisions (Wehman, 2006).

Job Observation Behavior Scale: Opportunity for Self-Determination

The *Job Observation Behavior Scale: Opportunity for Self-Determination* (JOBS-OSD) is an assessment of the work performance and support needs of students and adult employees in the community workplace. This includes students in employment training programs, as well as employees in supported employment, work experience, sheltered employment, and entry-level jobs. Its purpose is to gain input from individuals on the performance of their work and their perceptions of the level and type of support needed to maintain or improve this performance. Employment and vocational assessment systems are typically based on external evaluators' perceptions of a student or adult employee; JOBS-OSD focuses on the work performance and support needs of a student or adult employee from his or her self-determined perspective. As a standardized assessment, JOBS-OSD provides norms for comparing the self-determination perspectives of students who are getting ready to enter the work world and those of adult employees in community employment settings.

For secondary-aged students who are in work experience and supported employment programs, JOBS-OSD

plays a useful role in developing transition Individualized Education Programs. As part of a comprehensive system of alternative assessment for students who do not require standardized academic achievement measures, JOBS–OSD provides standardized work-oriented information for planning students' goals and objectives. JOBS–OSD is also useful for monitoring progress in secondary, transitional work experience and supported employment programs.

For entry-level and unskilled adult employees who work in competitive, supported, or sheltered employment, JOBS–OSD provides employees the opportunity to provide input into the type of vocational preparation and support needed to be successful in their jobs. This includes adult employees who are transitioning from sheltered employment to supported or competitive community work. Work supervisors, employers, rehabilitation counselors, job coaches, and others are frequently called on to evaluate adult employees to establish and achieve realistic employment goals. JOBS–OSD helps individuals make realistic assessments of their personal and employment strengths and needs, and it includes an assessment of both work performance and support needs. By encouraging employees to evaluate themselves in these work skills and routines, JOBS–OSD is useful as a communication bridge between supervisors and employees for reducing workplace ambiguity. This self-assessment is a critical component of success in long-term employment and community living. Historically, the absence of this input has been an employment barrier for many people with disabilities.

JOBS–OSD content and organization allow for at least five applications, including

- the perception of the quality of performance by students and adult employees;
- the perception of the type of support needed by students and adult employees;
- the perception of the need to adapt current supports to assist students and adult employees in seeking new employment, maintaining their employment, altering their work tasks, acquiring pay raises, or receiving promotions;
- the perception of students' and adult employees' employment strengths as well as their need for additional growth and development in employability over time; and
- the opportunity to provide input into the educational and rehabilitation plans (Individual Education Programs, Individualized Plans for Employment, Individual Support Plans) developed for students and adult employees.

How Is JOBS–OSD Organized?

A comprehensive evaluation for employment should contain at least two facets: first, an external assessment of a student's or an employee's performance and need for support (typically conducted by a teacher, work supervisor, rehabilitation counselor, or job coach) and, second, a self-evaluation (performed by the student or the adult employee), to understand the perspective of the individual from that person's frame of reference. JOBS–OSD is a self-evaluation measure of work performance and support needs that parallels the original *Job Observation and Behavior Scale* (JOBS), an external assessment administered by employment professionals (Brady & Rosenberg, 2002a; Rosenberg & Brady, 2000). Together, JOBS and JOBS–OSD form an objective behavior-based employment evaluation system, standardized on school-age students and adult employees in community employment settings.

Like the original JOBS, JOBS–OSD consists of three subscales: The first subscale represents work-related daily living activities. These 13 items represent the self-care and adaptive behavior patterns that students and adult employees need in order to function effectively in community employment settings. The second subscale contains 8 items composing work-related behavior. This subscale includes the interpersonal and social skills needed to function in community work settings. The third JOBS–OSD subscale involves work-required job duties, and it includes 9 items that consist of tasks typically found in entry-level unskilled jobs. Cumulatively, the 30 items represent critical vocational behaviors (Krantz, 1971) needed to obtain, perform, and advance in community employment. Table 1 provides a summary of the JOBS–OSD subscales and items.

Each JOBS–OSD item is drawn from a parallel item in the original scale and is presented so that individuals can make realistic assessments of their personal and employment strengths and needs. Because JOBS–OSD requires a self-assessment from individuals with a range of cognitive and communication abilities, several alterations were made to the structure and format of the original JOBS items. First, each JOBS–OSD item was modified so that the information is obtained through a standardized interview leading to a self-directed assessment. This response format requires that data be obtained from individual students and adult employees (an internal source of information) rather than from teachers, work supervisors, job coaches, rehabilitation counselors, and others (an external evaluation source). Second, clarifying examples and operational definitions were preestablished for each item, in lay language, to

Table 1**Subscales and Item Summaries for the *Job Observation Behavior Scale: Opportunity for Self-Determination***

Daily Living Activities	Behavior	Job Duties
Attendance	Stress tolerance	Quality of work
Punctuality	Interpersonal work interactions	Quantity of work
Personal hygiene and grooming	Interpersonal social interactions	Speed of learning new tasks
Travel	Changes in routines	Performance on previously learned tasks
Verbal communication	Honesty	Multiple task performance
Nonverbal communication	Reaction to criticism	Organization of work tasks
Money	Work initiative	Safety procedures
Reading	Work endurance	Cleanliness of work environment
Math		Employee motivation
Self-identification		
Work schedule		
Personal schedule		
Work facilities		

Table 2**Sample Item Adaptation for the *Job Observation Behavior Scale: Opportunity for Self-Determination***

Original item	Punctuality
Adaptation	Being on time
Quality of performance	For the query "Are you at work when you're supposed to be there?" the interviewer provides three clarifying examples: "Do you get to work on time?" "Do you get back from breaks on time?" "If you're going to be late, do you let your supervisor know?"
Type of support	For the query "Do you need help to get to work on time?" the interviewer provides the clarifying example "If you can't get to work, do you get the help you need to let your supervisor know?"

maximize comprehension and communication about the items. Third, the original JOBS items were rewritten so that data could be collected in an interview rather than through direct observation. Table 2 provides an example of a JOBS-OSD item with clarifying examples for the interviewer for the quality of performance and type of support.

Following the modification procedures, we obtained feedback on the items from a pool of education professionals in secondary school settings and from employment professionals in business and rehabilitation settings. From this feedback, we revised the wording of the items until panel members reached consensus on the clarity and integrity of each item. The revised items were presented to a second panel of students and adults, with and without disabilities, who were working in community job settings. This consumer panel also provided feedback on the clarity of the items. When each item elicited an indication of comprehension by the consumer panel, it was adopted for inclusion in JOBS-OSD.

The last alteration to the original JOBS protocol involved changing the response format. The original

5-point response scale was simplified to a 3-point scale. For quality-of-performance ratings, respondents reported "Yes," "Sometimes," or "No, not really" to the interviewer's query about how well they perform a behavior. For type-of-support ratings, an interviewer asked respondents to select one of three options about their need for support. These three options were: "Can you do it by yourself?" "Can you do it with some help?" "Do you need a lot of help?"

Establishing the Technical Properties of JOBS-OSD

A series of analyses were conducted to establish the technical properties of the instrument, including a reliability and validity analysis, a factor analysis to confirm the structure of the instrument and the distribution of the items, and an initial standardization process to establish JOBS-OSD norms. Although a detailed description of the method and results has been presented (see Brady, Rosenberg, & Frain, 2006), a summary of these data is included here.

Table 3
Summary of Participants' Demographics

Adults in supported, competitive, and sheltered employment ($n = 78$)
Age: 22 to 67
Sex (%): Female, 47; male, 53
Disability classification (%): Mental retardation, 51; autism, 6; learning or behavioral disorders, 24; sensory impairments, 16; physical disabilities, 3
Secondary students in employment training programs ($n = 27$)
Age: 17 to 21
Sex (%): Female, 33; male, 67
Disability classification (%): Mental retardation, 51; autism, 20; learning or behavioral disorders, 22; sensory impairments, 4; physical disabilities, 4

Participants. In sum, 105 individuals with disabilities were selected from a range of educational, rehabilitation, and employment settings. The first category included 78 adult workers with special employment needs in supported, sheltered, and competitive employment settings. The second category included 27 high school students with disabilities who participated in volunteer work experience and supported employment programs as part of their school curriculum. The participants were distributed across six geographic locales (Hartford, Connecticut; Tulsa, Oklahoma; Miami-Dade, Broward, and Palm Beach counties, Florida; and Columbia, Missouri) and so represented a spectrum of ethnic, cultural, linguistic, and racial diversity. Table 3 summarizes demographic data for each set of participants.

The participants in the technical studies held positions and job categories reflecting the sample in the original JOBS studies (Brady & Rosenberg, 2000b; Rosenberg & Brady, 2000). This included employment or training roles in landscaping and agriculture (lawn maintenance, gardening), clerical work (filing, duplicating, telephone answering), assembly and light manufacturing, hotel and restaurant service (food preparation, waiter, "sandwich artist," table bussing, housekeeping, pool maintenance), retail (bagging, stocking, customer service), automotive (washing and waxing, detailing), custodial work, and patient assistance (child/geriatric care).

Standardization. For each of the three JOBS-OSD subscales, we established norms for the students and adult employees using the same data that were collected for the reliability and validity studies. These data were also used to establish norms for the composite scores of the quality of performance and the type of support. The standardization results indicated that the adult employees scored somewhat higher than the students did, particularly on their type-of-support scores. These results

are summarized in Table 4. The standardization analysis also demonstrated that individuals in competitive work roles perceived less need for employment support than individuals did in either supported or sheltered employment ($p < .01$). This finding held for a comparison of supported versus sheltered employment; that is, individuals in supported employment perceived less need for support than individuals did in sheltered settings ($p < .05$). Overall, the standardization analyses established that JOBS-OSD is effective in discriminating the performance quality and support needs of students and adults in a variety of employment roles and settings.

Test-retest reliability. An analysis of test-retest reliability was conducted. JOBS-OSD was administered to a sample of student and adult employees ($n = 60$) on two occasions, separated by an interval of approximately 2 weeks. These two ratings were conducted independently, with initial scores unavailable to the evaluation administrators, the students, and the adult employees. Pearson product-moment correlations between the initial and subsequent ratings were determined, to establish the consistency between these independent ratings. Separate analyses were conducted for quality of performance and type of support and so indicated high test-retest reliability for both quality of performance ($r = .83$) and type of support ($r = .91$). Reliability estimates were also established for each subscale and so resulted in a high degree of consistency for each. These reliability estimates yielded correlations as high as .81 for daily living activities (type of support) and for job duties (quality of performance), with all the reliability estimates higher than .71. Thus, the test-retest reliability analysis established that JOBS-OSD ratings by secondary students and adult employees were stable across time for the overall scale and each subscale (see Table 5).

Internal reliability. An internal consistency analysis was conducted for the total scale and for each subscale. The coefficient alpha (reliability) for the total scale was .96. The coefficient alphas of the three subscales were as follows for type of support: work-related daily living activities, .74; work-related behavior, .78; and work-required job duties, .85. The three subscale measures for quality of performance yielded the following internal alphas: work-related daily living activities, .90; work-related behavior, .88; and work-required job duties, .90 (see Table 5). All the subscales were significantly correlated with each other ($p < .01$), which indicates that they are likely related concepts; for instance, the type of support is likely to have similarities for work-required job duties and work-related behavior. The two overall constructs—quality of performance and type of support—also show a

Table 4
Comparisons of Quality of Performance and Type of Support for the Job Observation
Behavior Scale: Opportunity for Self-Determination

Construct	Subscale			
	Daily Living Activities	Behavior	Job Duties	Composite Scores
Quality of performance				
Adult employees (<i>n</i> = 78)				
<i>M</i>	34.35	21.17	22.67	77.99
<i>SD</i>	4.16	3.34	4.26	10.60
Range	19–39	12–24	10–27	48–90
Students (<i>n</i> = 27)				
<i>M</i>	33.30	22.08	23.19	78.88
<i>SD</i>	3.90	2.13	3.80	8.49
Range	25–39	16–24	11–27	52–90
Type of support				
Adult employees (<i>n</i> = 78)				
<i>M</i>	33.19	20.84	22.38	76.17
<i>SD</i>	6.17	3.92	4.78	13.96
Range	16–39	8–24	9–27	33–90
Students (<i>n</i> = 27)				
<i>M</i>	29.88	19.70	20.85	71.16
<i>SD</i>	5.87	4.05	4.35	12.35
Range	18–39	8–24	11–27	45–90
Possible range	13–39	8–24	9–27	30–90

Table 5
Means, Standard Deviations, and Reliability Estimates of the Job Observation
Behavior Scale: Opportunity for Self-Determination

Factor: Subscale	<i>M</i>	<i>SD</i>	Internal Reliability	Test–Retest Reliability
Quality of Performance				
Daily Living Activities	32.5	6.2	.90	.71
Behavior	20.6	3.9	.88	.79
Job Duties	21.9	4.7	.90	.81
Type of Support				
Daily Living Activities	34.2	4.1	.74	.81
Behavior	21.4	3.0	.78	.78
Job Duties	22.9	4.1	.85	.79

Note: *N* = 105.

strong correlation ($r = .76$), indicating that although they are unique, they have a strong influence on each other. Means and standard deviations for each subscale for this sample are included in Table 5.

Validity. Two types of validity were established for JOBS–OSD: content validity and concurrent validity. Content validity was established by linking each JOBS–OSD item to the items of the original instrument. The original items were derived from prior research on work adjustment, employability, and supported employment between 1961 and 1998, as well as

from subsequent studies on self-determination. Each item selected for JOBS and JOBS–OSD had a history of importance regarding the assistance of individuals with special employment needs in obtaining and maintaining work. Items were selected only if they appeared in the literature more than 10 times, across a minimum of 10 years, and in the works of at least five independent investigators. These items continue to appear as critical indicators of employability and self-determination. Thus, content validity was established by linking each individual JOBS–OSD item to the research on employability.

Concurrent validity was established using two additional processes. First, we compared an overall perception of the need for support among 65 students and adult employees against their JOBS–OSD type-of-support scores. This perceived-need-for-support rating is an indication of participants' global self-evaluation of the support that they need to work at a given performance level. To establish a rating of an overall perception of support, participants were asked to form a general opinion about how much support they needed to perform their jobs and then to select a score using the following rubric: 3 = *I can do my work by myself*, 2 = *I need some help with my work*, 1 = *I need a lot of help with my work*.

This rubric is numerically and conceptually identical to the actual JOBS–OSD scoring system. The results allow a direct comparison of the instrument's type-of-support composite scores to the participants' perceived needs. Pearson product–moment correlations indicate a strong positive correlation ($r = .72, p < .001$) between the JOBS–OSD type-of-support scores and participants' overall perception of support needs. These results establish the first measure of concurrent validity of the JOBS–OSD type-of-support construct.

The second concurrent validity analysis correlates the JOBS–OSD quality-of-performance construct to a popular instrument used in employability programs, the *Brigance Diagnostic Employability Inventory* (Curriculum Associates, 1995). For this analysis we selected the *Brigance* scale most germane to JOBS–OSD, the *Trainee's Work Experience Rating Scale*. The 30 JOBS–OSD quality-of-performance items were correlated with the 20 *Brigance* items from that scale. To allow a quantitative comparison of the ratings, the *Brigance* scoring protocol was modified by adding a numeric value to the response options via the following rubric: 4 = *very good (your work is very good)*, 3 = *acceptable (your work is OK)*, 2 = *could be improved (you only need a little improvement)*, 1 = *much improvement needed (you need a lot of improvement)*. Pearson product–moment correlations between the JOBS–OSD quality-of-performance and *Brigance* scales were calculated and so indicated a moderate positive correlation ($r = .25, p < .05$). These results establish a measure of the concurrent validity of the quality-of-performance scales of JOBS–OSD.

Factor analysis. The original JOBS instrument was constructed on the basis of published literature and professional consultation (for complete information, see Rosenberg & Brady, 2000). Factors identified in previous research include the need for employment support and the ability to perform work behaviors in three critical

areas: work-related daily living activities, work-related behaviors, and work-required job duties. JOBS–OSD was developed to parallel these factors and to measure the factors based on the self-determined perspective of the student or adult employee. The validity findings of the original JOBS thus became the support for the theoretical rationale for JOBS–OSD. Based on this previously determined theoretical model, a confirmatory factor analysis using a maximum likelihood estimation with orthogonal varimax rotation was completed on the JOBS–OSD. A full description of the methods used in the factor analysis, as well as the complete results of this analysis, can be found elsewhere (see Brady et al., 2006); the information presented here summarizes the method and results used to confirm the JOBS–OSD factors. Although the participant:variable ratio in the present study (105:60) is lower than that in many factor analytic studies, factor analysis is typically quite valuable in research when the sample size is greater than 100 (Gorsuch, 1983; Kline, 1979). It is included here with the acknowledgment that a greater sample size would likely result in a more stable analysis.

A forced six-factor extraction and a forced two-factor extraction were analyzed on the basis of scree plot examination. Six factors from JOBS–OSD accounted for 48% of the variance. Five of the factors fit well into the theoretical model of JOBS–OSD, with clear loadings of the items from five of the subscales clearly falling into one factor or another. However, while still accounting for a significant amount of variance, the sixth factor did not have a clear profile. Type of support needed for daily living activities did not clearly fall into a single factor, with some items loading greater in a unique factor and with others loading with type of support–job duties. Therefore, a forced two-factor extraction factor analysis was conducted. The two factors accounted for 36% of the variance in JOBS–OSD and were rotated to varimax criterion. Convergence was established in 11 iterations.

Before the main analysis, the appropriateness of factor analysis was supported by the Kaiser–Meyer–Olkin measure of sampling adequacy ($KMO = .77$) and Bartlett's test of sphericity, $\chi^2(1,770, N = 105) = 4,270.83, p < .000$. Individual factors were examined per the factor loadings. The first factor, Type of Support, accounted for 20% of the variance; the second factor, Quality of Performance, accounted for 16% of the variance. Examination of the items revealed that all the Type of Support items from JOBS–OSD loaded at .40 or better on the first factor. Three Type of Support items also loaded at greater than .40 on the second factor but were a conceptually better fit for Type of Support subscales

Table 6
Selected Items From Factor Analysis

Factor: Subscale and Item Number	Factor 1: Type of Support	Factor 2: Quality of Performance
Type of Support		
Daily Living Activities, Item No. 12: Personal schedule Behavior, Item No. 2: Work interaction	.75	.11
Job Duties, Item No. 7: Safety procedures	.54	.22
	.60	.34
Quality of Performance		
Daily Living Activities, Item No. 2: Punctuality	.04	.26
Behavior, Item No. 4: Change in routines	.21	.60
Job Duties, Item No. 5: Multiple tasks	.03	.62

and were thus kept there. Two of the three Quality of Performance subscales (work-related behavior and work-required job duties) had all their items, with one exception, load at .40 or better on the second factor. The one item, “Do you get along with people you work with when you take a break from your job duties?” loaded at .22 on Factor 2 and did not load on Factor 1. Thus, this item was kept as a Quality of Performance item. Work-related daily living activities did not load cleanly on either scale, with 9 of the 13 items loading at less than .40. This is an overall concern for these items, and caution should be taken with this subscale. However, past literature, and the previous JOBS studies have indicated the importance of work-related daily living activities as a key component to quality of performance in employment settings. Therefore, the items were kept in this scale with the acknowledgment that further research with larger samples is needed in this area. Table 6 illustrates typical loadings by providing an example of one item from each subscale, along with its loadings on each factor. A complete factor-loading table is presented in the original manual (Brady et al., 2006).

Practical Applications of JOBS–OSD

Like the original JOBS, JOBS–OSD is designed to be administered by teachers, rehabilitation counselors, job coaches, and work supervisors who are responsible for the training, placement, and support of current and future employees. Unlike the original evaluation, JOBS–OSD results are based on the input of the students and adult employees who are the focus of the evaluation. Typically, community employment decisions (e.g., job placements, promotions, job retention, salary increases, probationary outcomes) are made by people with multiple job roles (employers, teachers, rehabilitation counselors, job coaches, etc.), often without meaningful input by the students or the employees (Valenzuela & Martin, 2005).

JOBS–OSD provides a vehicle for students and adult employees to articulate their preferences and perceptions of their work performance and support needs. This process is crucial in promoting an individual’s self-determination over employment decisions.

Administration. JOBS–OSD is administered in a standardized interview format. The interview protocol consists of three steps, including an advance organizer (“I’m going to ask you about . . .”), a self-assessment of work performance, and a self-assessment of support needs. Because the protocol requires individuals to respond directly to each item, the time of evaluation depends on the cognitive and language fluency of the respondent and the fluency of the interviewer in delivering item modifications (typically, 20–30 min). After administering and scoring JOBS–OSD, an interviewer should compute and record scores for each subscale. Finally, the student or adult employee’s JOBS–OSD profile is established by transferring the data to composite scoring tables for item, subscale, and normative comparisons and interpretations.

Interpretation. JOBS–OSD items present student and adult employees’ perceptions of the quality of their work and the type of support that they believe is needed to maintain or achieve that performance. There are three methods for interpreting JOBS–OSD results. A direct interpretation of results includes an examination of the three subscales and an item-by-item examination of the student or adult employee’s responses. This involves looking for red-flag items in which an item does not appear to represent the actual performance or support needs of the person. Also included in the direct interpretation are any patterns of responding that might indicate a respondent’s difficulty in understanding the item or one’s inability to make objective self-evaluations.

A second method of interpreting results involves the use of a discrepancy analysis in which JOBS–OSD

results are compared to the results of a standard JOBS evaluation (Rosenberg & Brady, 2000), administered by an external evaluator (e.g., job coach, teacher, rehabilitation counselor, work supervisor). This discrepancy analysis identifies any important differences between the external evaluator and the individual student or adult employee's perceptions of performance and support needs. If discrepancies are found, the nature of the discrepancy must be established given that the discrepancy is either an underrepresentation or an overrepresentation of actual performance or support needs.

The third interpretation approach involves a comparison of individual scores to group norms. This involves an analysis of a student or adult employee's JOBS-OSD results to norms established during the standardization studies. By comparing a student or adult employee's ratings to group norms, a teacher or work supervisor gains information on how a student or adult employee perceives his or her work performance and support needs relative to one's group membership (e.g., high school students, adults). This information provides a context for determining the need for goals, objectives, or interventions.

Using the results. The primary utility for both JOBS and JOBS-OSD is to prepare individual transitional plans, goals and objectives, and work placement interventions for students and adult employees in supported and competitive employment. For secondary students, this includes annual transition Individualized Education Programs and decisions related to entering or exiting work-experience training programs. For adults in structured work and habilitation programs, this includes Individualized Plans for Employment, Individual Support Plans, and other work and support planning processes. For other individuals in supported and competitive work settings, the employment context determines the frequency of administration. For students and adult employees, JOBS-OSD can provide useful information when making decisions regarding whether interventions are improving the work productivity of the individual or changing the support needs of the individual. It can also be useful whenever a student, adult employee, teacher, rehabilitation counselor, job coach, or employer proposes a change in work status (work assignment, new placement, different goals and objectives, etc.).

When used together, the original JOBS and JOBS-OSD incorporate a model of external evaluation, as well as an assessment model based on self-determination. The combination of these data sources assists employment professionals, students, and adult employees in establishing whether discrepancies or agreements exist, by comparing the various perceptions of the quality of work

performance and the type of support needed to maintain that work quality.

Limitations

This study has a number of limitations. First, the sample size of 105 is relatively small to draw conclusions about subsets of the population; this is particularly evident for the student sample. Second, because the items regarding work-related daily living activities do not correlate as highly as would be desired, this scale should be evaluated with caution until more data become available. Third, for anonymity reasons, the norm sample did not include some aspects that may have an influence on scores on the JOBS-OSD (e.g., race). Because of these limitations, further studies are needed to increase the reliability and generalizability of this instrument.

Summary

The work and social behavior patterns necessary to obtain and maintain employment have long been identified (Kolstoe, 1961; Krantz, 1971; Warren, 1961). Employment professionals and educators have opened the doors of supported community employment to many individuals by including these critical skills in their support and intervention programs (Martin et al., 2006; Stodden, 1998; Taylor et al., 2005). Within the last decade, self-determination has increasingly been recognized as another critical employment factor. Research has shown that students and adult employees who have genuine opportunities to influence their own employment options experience positive and powerful employment outcomes (Abrams et al., 1997; Martin et al., 2006; Menchetti & Garcia, 2003; Wehmeyer & Schwartz, 1997). JOBS-OSD was developed as a link between these two bodies of knowledge and to obtain the self-determined perspective of individuals' work performance and need for support in employment settings.

The results of the various analyses summarized in this article suggest that such self-determination needs can be assessed through the use of the JOBS-OSD. The analyses indicate that there are clearly separate factors perceived by individuals in terms of their actual job performance and the support they need to attain that performance. By understanding these separate factors, students and adult employees can participate—along with their teachers, job coaches, rehabilitation counselors, or employers—in decisions involving the supports necessary for successful transitions into the world of work.

These professionals can use JOBS–OSD in combination with other assessments to establish more complete planning, support, and training goals. In addition, the information garnered from JOBS–OSD can be compared with other, “external” evaluations to understand agreement and discrepancies between evaluators and the students and employees themselves.

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