

A Human Resource Development Performance Improvement Model for Workers with Mental Retardation in Supported Employment

Sandra Fornes, Howard Rosenberg, Tonette S. Rocco, and Jo Gallagher
Florida International University

This literature review discusses the factors for successful job retention of adult workers with mental retardation (MR) including external factors related to work environments and internal issues of the individual worker. Through the synthesis of the literature, a performance improvement model for supported employment (SE) is discussed based on Holton's HRD/PI theory.

Keywords: Job Retention, Job Performance, Workforce Development

Among the 54 million adults with disabilities in the United States 33 million have a severe disability and 10 million need assistance in their daily living (U.S. Department of Census, 2000). Most individuals with disabilities want to work, are capable of exceptional job performance (Bellamy, Rhodes, Mank, & Albin, 1988; Konig & Schalock, 1991) and are equal to people without disabilities in terms of productivity, turnover rates, absenteeism, and accident rates (Parent & Everson, 1986), yet over 75% of individuals with disabilities remain unemployed (U.S. Department of Census, 2000).

During the 1970s societal perspectives of disability underwent considerable changes including: (a) deinstitutionalization – the process of moving individuals with disabilities out of institutions into society; (b) mainstreaming – the process of moving children with disabilities out of segregated special schools into regular schools in the least restrictive environments with their non-disabled peers; and (c) normalization – the process of making the life and environment of individuals with disabilities as normal as possible (Pagliano, 2001).

A number of legislative initiatives illustrate this changes and the role of people with MR in our society. This legislation includes the Rehabilitation Act of 1973 (P.L. 95-504) and its subsequent reauthorizations (P.L. 99-506, 1986), the American with Disabilities Act of 1990, and the Developmental Disabilities Bill of Rights Act of 1984. These Federal initiatives have established the importance of rehabilitation, placement and employment of persons with disabilities and MR. Section 504 of the Rehabilitation Act of 1973 was designed to prohibit discrimination of “otherwise qualified” people and required employers to take reasonable steps to accommodate workers with disabilities (Gliedman & Roth, 1980). The Rehabilitation Act Amendments of 1986 established minimum wage standards for people participating in SE (Conley et al, 1989; Wehman, 1996). The Developmental Disabilities Act of 1984 (P.L. 98-527) also targeted employment growth and stipulated that integration of community job sites and competitive wages with desirable outcomes for workers with disabilities. The American with Disabilities Act of 1990 (ADA) stresses that employment with support is the primary outcome for workers with disabilities. More recently the 99th Congress enacted major legislation changes that continue to impact people with MR in terms of employment opportunities and outcomes.

This changing paradigm recognizes employment as central to adult life. Employment affects life quality, self-concept, and self-determination (Konig & Schalock, 1991). Employment of individuals with MR reduces societal prejudice (Phelan, Link, Stueve, & Pescosolido, 2000) and improves independence (Konig & Schalock, 1991). With meaningful work, individuals with MR become respected, constructive members of society involved in the mainstream labor force fulfilling individual and societal expectations (Ormel, Lindenberg, Steverink, & Verbrugge, 1999; Wright, 1980). Yet ADA and other federal initiatives have fail to improve the employment of individuals with disabilities as fewer individual with disabilities are employed today then prior to the execution of ADA. New legislation in 2005, The Employer Work Incentive Act for Individuals with Severe Disabilities (1570 IS, 109th Congress, 2005) challenges corporate America. The purpose of this Act is to promote employment opportunities for individuals with severe disabilities and MR, by requiring Federal agencies to offer incentives to government contractors and subcontractors that employ substantial numbers of individuals with severe disabilities. This legislation will expand competitive employment opportunities for individuals with MR by offering businesses an incentive to employ these individuals and provide both a competitive salary and good health care benefits. Senators Roberts and Kennedy introduced this legislation because of their deep committed to help Americans with severe disabilities seek and maintain employment and the need for system change. “We challenge the private sector and the business community to take the initiative and actively work to employ individuals with severe disabilities (Senator Roberts, 2005, in press).”

Copyright © 2006 Sandra Fornes, Howard Rosenberg, Tonette S. Rocco, & Jo Gallagher

Without system change in the form of legislation and strong advocacy, individuals with MR are unable to overcome the barriers need for full inclusion, yet it doesn't stop with legislation, it takes people and organizations to effect the change and herein lies the gap. The ability to obtain and retain employment for an extended period of time has tremendous implication. Successful job retention is important for the individual to ensure economic benefits, improved independence, quality of life, social well-being, and a decreased dependency on others for support (Rosenberg, Cheyney & Greenberg, 1991). Successful job retention for individuals with MR is also important to organizations. People with MR offer an untapped pool of productive employees for businesses looking for creative staffing solutions in a tight labor market (Holmes, 2005). Individuals with MR provided a pool of qualified workers able to fill the shortage of people seeking entry-level positions. Employing individuals with MR improves an organizations competitive advantage through a diversified workforce (Holmes, 2005). People with disabilities have a unique perspective that a smart employer can take advantage of. "Customers also have disabilities and by employing people with disabilities, companies can learn about that target market (Holmes, 2005)." Additionally, tax incentives and government contracts are awarded more frequently to those organizations employing individuals with disabilities. Companies that employ people with disabilities are seen as acting in a socially responsible manner and viewed more positively by the community (Holmes, 2005). Whether organizations employ individuals with MR due to the need to fill entry-level positions, create more competitive advantages through a diverse workforce, or seeking tax incentive, HRD faces new challenges.

HRD's principle purpose is to improve organizational performance through increased productivity, efficient work processes, and individual contributions (Swanson & Arnold, 1996). Those constructs that improve human performance and individual contribution such as person-job "fit", job satisfaction, self-determination (actualization); personality characteristics and behaviors, etc, have been researched in the general population, but may differ for individuals with MR. For example, research in the population without disabilities has shown that while job satisfaction improve job retention; job satisfaction does not necessarily improve performance in the non-disabled population (Iaffaldano & Muchinsky, 1985). In individuals with MR, research suggests the opposite, that job satisfaction does affect and improve job performance (Wehmeyer, Kelchner, 1997). Thus, the training and career development strategies for individuals with MR may require modification based on various behaviors and work constructs and there relationship to workers with MR.

Problem Statement

High unemployment rates for adults with MR exist due to poor job retention and performance. Job retention is decreased by work environment and organizational factors such as employer ignorance and bias (Rusch, 1986), lack of opportunities, poor placement, lack of role models, inadequate job-match, and career development, as well as deficiencies the restructuring jobs, work redesign and training programs to accommodate individuals with MR (Lagomarcino, Huges, & Huges, 1999). Poor job retention can be partially attributed to the failure of vocational rehabilitation practices, such as prevocational training programs, sheltered workshops and transitional employment, to provide integrated paid employment for people with MR (Wehman, 1986; Wehmeyer, Agran, & Hughes, 1998). Even supported employment (SE), which has been identified as the most promising approach to integrate, paid work environments (Rusch, 1986) has not provided for long-term job retention (Konig & Schalock, 1991). Furthermore, poor job performance and social behavioral factors combined are a major cause of job loss for individuals with MR (Greenspan & Shoultz, 1981; Lagomarcino et al., 1989). How can we improve the job retention and job performance of individuals with MR through supported employment?

The purpose of this paper is to examine the literature on job retention of adults with MR and discuss the external and internal factors that influence successful employment, to propose suggestions for HRD to enhance performance and through the synthesis of the literature, provide a performance improvement model for supported employment (SE).

Method

A structured literature review was conducted followed by a content analysis of the literature. Educational Resources Information Center (ERIC), PsycInfo, and ABI Inform were selected with the assistance of a reference librarian as most representative of education, psychology, and business. Abstracts and articles were read and categorized by external and internal factors influencing job retention in individuals with MR. Tables were created to organize by these factors. Cognitive mapping was used to create a mental model of the overall meaning of the text. A graphic map depicts the relationships between concepts. Cognitive mapping lends itself to the comparison of semantic connections across texts and attempt to represent the relationship(s) between ideas, beliefs, attitudes, and

information available to an author within a text. These relationships can be represented as logical, inferential, causal, sequential, and/or mathematical relationships (Palmquist, Carley, & Dale, 1997).

External: Work Environment Factors Influencing Successful Job Retention

Integrated employment is the defining characteristic of SE and is achieved when persons with disabilities are afforded an equal opportunity to participate in the workplace with co-workers without disabilities (Rusch, 1990). An integrated workplace is formed only when individual differences are accepted and individual competence is maximized (Rusch, 1990) and achieved by obtaining appropriate training and ongoing support customized to the individual's need (Konig & Schalock, 1991). Employer attitudes can be a major impediment to employment (Bolton & Roessler, 1985) as well as socioeconomic disadvantage, societal attitudes and values, educational and workplace prejudices, lack of role models, training and poor transition from school to work (Leach, 2002). Once on the job, workers with MR continue to face further challenges (Konig & Schalock, 1991). External, work environment factors affecting job retention include: (a) job matching to ensure that individuals are suitable to the job, work environment and work culture (Holland, 1985); and (b) a support system that provides ongoing and training and support to maintain job skills and valued work behaviors and attitudes (Chadsey-Rusch, 1986).

Job Matching: Person-job fit and Person-environment fit

Each individual has different needs, abilities and interests that must be evaluated to ensure that their work and support is appropriate. When individuals with MR interests, skills, abilities, and characteristics are congruent (both behavioral and cognitive) with their job and work environment, their performance and work motivation improves and they remain longer on the job (Holland, 1985). This congruency between the person and the job environment increases job satisfaction, job performance (Konig & Schalock, 1991; Leach, 2002), and work motivation (Berkell, 1987). These factors may be more critical to employment success than specific job skills (Berkell, 1987). Consumer choice empowers individuals with MR to make reliable choices about their interests and the jobs they want. They learn to express their work preferences and match their work, social and personal strengths to job requirements (Leach, 2001).

It becomes important to analyze settings in order to identify behavioral expectations; placing the individual in the target setting; adjusting the performance of the employee; achieving congruity with in the expectations of the employer, co-workers, and the supported employee; and developing strategies for long-term behavioral adjustments.

Support System

The continuous availability of support following job placement is a hallmark of the SE model (Cook & Rosenberg, 1994). The amount of time or activities conducted by an employment specialist to enable employees with MR to obtain, learn, perform and maintain a job and job skills is directly related to their success in job retention (Wehman et al., 1989).

On-the-Job Training allows for rapid placement into paid community employment versus a lengthy sheltered worker training model. Individuals assigned to a supported "accelerated" (versus gradual) job placement model are more likely to be employed in 9 months and working full-time in 15 months than those undergoing a lengthy, sheltered work adjustment training. Furthermore individual in supported paid employment programs achieved superior outcomes, such higher employment rate, higher job satisfaction and lower absenteeism than those receiving sheltered work services prior to their first job (Wehman, 1986). Employees in SE are more integrated and socialize more with non-disabled co-workers, are more often competitively employed and earn higher wages than those individuals in mobile work crews or clustered group placement. (Drake, McHugo, Becker, Anthony, Clark, 1996).

Natural Support promotes co-worker involvement as a means to provide consistent, ongoing training and follow-up services in an integrated work setting (Nisbet & Hagner, 1988). Natural support is any assistance, relationship, or intervention that allows a person with MR to maintain and advance in a job. Natural support promotes non-disabled co-worker involvement as a means to provide consistent, ongoing training and follow-up services in an integrated work setting (Rogan, Hagner, & Murphy, 1993). Non-disabled co-workers serve as observers, trainers, associates, ongoing supervisors, advocates, and instructional program developers (Rusch, Hughes, & Johnson, 1991). They evaluate employees with MR providing feedback regarding their social and work performance (Rusch et al., 1991). Co-workers assist employees with MR in building productive work habits and social skills. These relationships with co-workers and support of the organization influence integration, job satisfaction, employment success, and job tenure of individuals with MR (Hill, Wehman, Hill, & Goodall, 1985). Increasingly, employers have realized that the skills co-workers learn when assuming support roles benefit the company as a whole (Nisbet & Hagner, 1988; Rogan et al., 1993). Pizza Hut, Inc, MacDonalds, the Marriott Corporation and others have initiated their own efforts to hire and support people with MR using internal company resources.

Community-Based Vocational Education (CBVE) is an effective approach in delivering vocational education and training to individuals with MR providing services in community work settings rather than in conventional school environments. In order to prepare students with mental retardation for life in integrated work and living situations, it is necessary to provide experiential opportunities in dealing with the demands and expectations of these environments (Wehman & Kelchner, 1997). Individuals with MR often do not understand the unstated rules of the workplace, with many of these rules relating to social interactions and social reciprocity. Furthermore, persons with MR need to learn when the situation is different and when it is the same (discrimination-generalization) (Wehman et al., 1986). Generalization occurs more frequently when instruction takes place in the real world outside of the classroom. Furthermore, if an individual has learned to perform certain behaviors in several natural work settings and interacts with a variety of people, the person will be more likely to perform those behaviors in novel settings (Lagomarcino et al, 1989). Community based instruction within work environments bridges the gap between classroom learning and competitive job placement (Bellamy et al., 1988).

Internal: Individual Worker Factors Influencing Successful Job Retention

A combination in appropriate work-related social behaviors and poor job performance accounts for 70% of job separations (Chadsey-Rusch, 1986; Hill, Wehman, Hill, & Goodall, 1985). Successful job retention for adult workers with MR is directly related to the degree of worker's behavior and attitudes including person-job congruency (Rosseler, 2002), self-determination (Wehman & Kregel, 1998), work-related social behaviors, performance (Hill et al., 1985; Greenspan & Shoultz, 1981), and job satisfaction (Rosseler, 2002; Wright, 1980).

Individual Work Behaviors and Attitudes

Behavior and attitude toward the job, work environment, self and others are critical for successful job placement (Chadsey-Rusch, 1986; Greenspan & Shoultz, 1981). Social behaviors related to specific interactions at work (Chadsey-Rusch, 1986) include (a) social awareness, (b) temperament and aberrant behaviors, and (c) personality characteristics (Rosenberg & Brady, 2000). Social awareness includes the ability to get along and interact with supervisors and co-workers and to understand the work environment (Greenspan & Shoultz, 1981; Hanley-Maxwell, Rusch, Chadsey-Rusch, & Renzaglia, 1986). Temperament and aberrant behaviors include insubordinate and aggressive behavior, idiosyncratic behavior (Greenspan & Shoultz, 1981; Hill, Wehman, Hill, & Goodall, 1985), and the inability to deal with the pressures and stress of the job (Salzberg, Agran, & Lignugirs/Kraft, 1986). Personal characteristic factors refer to absences, tardiness (Sitlington & Easterday, 1992), being uncooperative (Greenspan & Shoultz, 1981); the ability to accept criticism, job responsibility (Lagomarcino et al, 1989); take initiatives, ability to following directions or to ask supervisor or co-workers for assistance (Salzberg et al., 1986), taking pride in one's work, value honesty and conform to socially acceptable standards of truthfulness and to come to work well groomed (Rosenberg & Brady, 2000).

Personal Development: Person Centered Approach

Successful job retention place emphasis on the principles of a person-centered approach, a process of discovery of individual aims, aspirations and skills that focus on the individual rather than service provision constraints (Leach, 2002). Services are driven toward changes that lead to increased work effectiveness based on principles that: (a) employees identify a core of critical work required behaviors and sees these core critical behaviors as relevant to their own employment situation; (b) self-determination, being proactive in making choices and participating in decisions about work and other aspects of ones' life; (c) social and economic inclusion; regular life experiences that include family, friends, acquaintances, a job and a social life; (d) choice and independence – having the support, advice and information to make real choices and the support to be able to follow through; (e) learn about work in work – people learn about life by living, not by having life experience in segregated life centers; and (f) employees must have a means of self-evaluating their own status (Leach, 2002; Rosenberg & Brady, 2000).

The majority of job retention strategies foster individuals with MR to depend on the employment specialist (Chadsey-Rusch, 1986) rather than rely on their knowledge about the structural relationships among occupations and plan their careers. Therefore, individuals with MR need assistance in personal development to explore their personality characteristics and skills, to learn to take personal responsibility, to develop self-esteem, and to learn to communicate effectively with others (Konig & Schalock, 1991). Personal development includes fostering such self-determination (Wehmeyer et al., 1998) components as self-knowledge and awareness, self-advocacy, self efficacy and appreciation, planning and decision making, performance and adjustment, and self monitoring and evaluation (Wehmeyer et al., 1998). Individuals with MR can enhance their autonomy during job searching by learning self-management skills which allow them to provide themselves with cues, create records of their work, evaluate their own performance, and provide themselves with feedback (Lagomarcino et al., 1989).

Work-required Job Duties

Among work-required job duties and skills, both verbal and non-verbal communication abilities are important to job placement and retention (Martin et al., 1987). Work required job duties and the ability to perform specific work tasks requires appropriate quality and quantity of work. Quality of work (error rate) is an employee's ability to work at the accepted standard for accuracy, and engage in quality control assessment when finished with a task. Quantity of work (production rate) is an employee's ability to work at an accepted rate and pace or productivity (Rosenberg & Brady, 2000). When faced with alterations in routine, employees must maintain quality and quantity of work productivity with appropriate work and social interactions. Safety also plays an important role and must be considered in work activities. When an individual develops work goals based on personal interest, abilities and barriers, their performance and work motivation, not only improves, but they remain longer on the job (Rosenberg & Brady, 2000).

Daily Living Skills / Life Skills

Financial resources, financial management (banking and budgeting skill understanding work schedules and the hours required to work, know ones days off and holidays, scheduling personal activities so they do not conflict with ones work schedule; travel all affect individuals with disabilities entering the workforce and are requirements for successful job retention (Bellamy et. al, 1988).

Family

Family issues and parental interference were also cited as a reason for an employee's separation from their job. Families operate as a system so that significant events do not affect one member in isolation but rather have an impact on the entire family. Therefore, efforts to secure family involvement in all supported employment planning and decision making needs to be a major priority (Chadsey-Rusch, 1986). Individuals with MR become more successful in finding employment when their family is actively involved in their work life (Hill et al., 1985).

HRD professionals, educators, rehabilitation counselors, etc., have linked job success to worker behavior and disposition. There are specific behaviors and attitudes, which must be considered when placing all individuals including those with MR into jobs. A HRD model for performance improvement in SE is an initiatives that HRD may consider implementing for successful employment of individuals with MR.

A HRD Model for Performance Improvement in Supported Employment

Program approaches in SE share concerns and responsibility for specified outcomes of providing opportunities for individuals with MR to obtain paid work in an integrated setting and access continual support to maintain employment. Holton's (1999a, 1999b) Performance improvement – Human resource development model (PI/HRD) is used to illustrate a synthesized model for SE program's outcome - integrated, competitive employment. The PI/HRD model (Holton, 1999a, 1999b) includes four domains, mission, process, critical subsystems, and individual, that provide a useful conceptual tool for viewing and obtaining the required outcomes of SE programs (Figure 1).

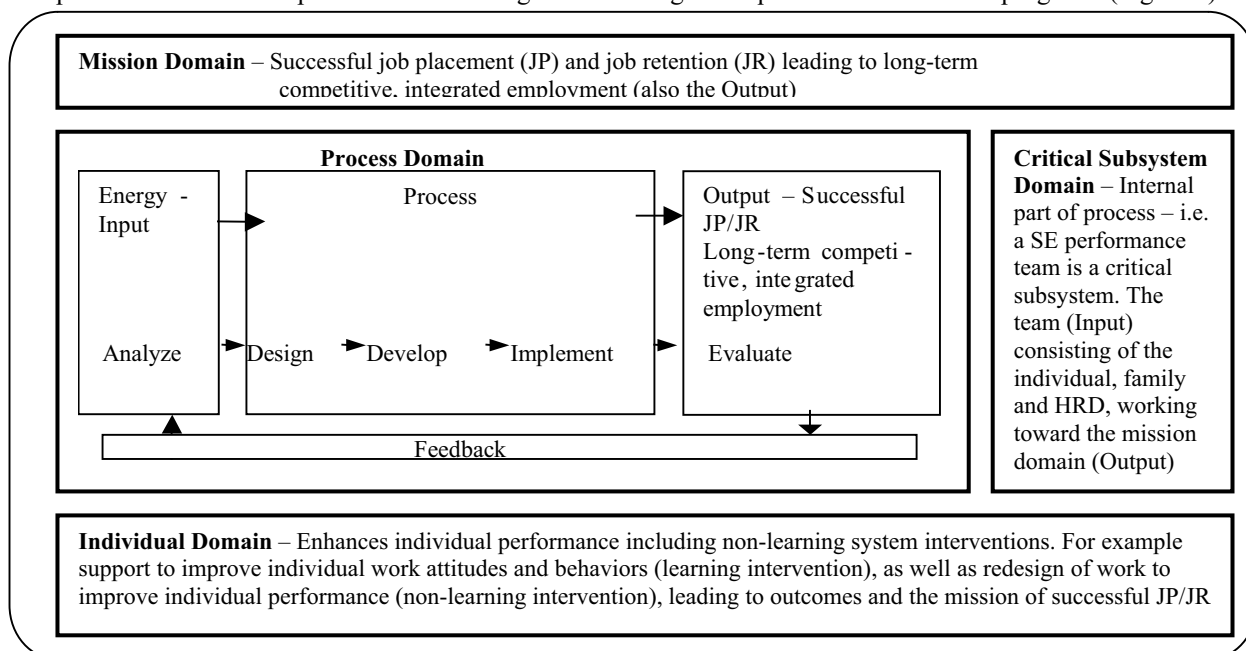


Figure 1. *Holton's PI/HRD Performance Model (1999a, 1999b) Applied to SE*

Mission Domain

Performance is measured by the outcomes (products or services), rather than by the processes (procedures) (Holton, 1999b; Gilbert, 1978; von Beralanffy, 1968). The systems mission, (Holton, 1999) or goal, (von Beralanffy, 1968) states that the objectives derived from the mission specify the expected outcomes of that system. In SE the mission is to provide competitive, integrated employment for individuals with MR, which also serves as the outcome (the results/product). Additionally, this mission reflects the system's relationship with the external environment; such as the relationship individuals with MR have with external organizations, the community, and individuals without disabilities. The notion of mission is particularly relevant to SE because of the focus on the valued outcomes which serves as the needed conceptual framework for clarifying the similarities across all SE approaches and providing a foundation for program planning and management (Bellamy et al., 1988).

Process Domain

Process is the specific ordering of actions or value chain, by which the system converts energy (input) from the environment into products and services as outputs, which are used by the system itself or by the environment (Rummler & Brache, 1995). Process can be modified in response to feedback about system performance. To provide successful SE, an organization must create the opportunity for competitive integrated employment (the mission and outcome) within an integrated system through (a) identifying what work needs to be accomplished and what employee abilities and skills are required by analyzing the job, job tasks, and the individuals' abilities and skills (analysis); (b) designing the requirements for individuals with MR to perform and redesign the job itself if necessary (design); (c) developing the job and the supported program based on design information (develop); (d) integrating the employee with MR into the social and physical environment of the job and meet the employees ongoing support needs (implement); (e) evaluating if the work is performed according to the employer's requirements (evaluate) as well as the SE environment and system. This may include evaluation of support systems in place and accommodations made. Finally, the feedback process maintains the organization's capacity to offer supported employment. If the organization accomplishes all these processes and outcomes, it will succeed in its mission domain of successful job placement and job retention leading to long-term integrated, competitive employment for individuals with MR.

Critical Sub-systems Domain

Subsystems critical domain subsystems differs from the overall system (mission domain) in that the mission domain defines performance outcomes relative to the external environment while the critical performance sub-system domain defines performance outcomes relative to internal outcomes that do not always directly connect with the external environment (Holton, 1999b). Each sub-system may be part of many processes and not all sub-systems will be critical to the accomplishment of the performance system's mission (Holton, 1999a). For example, with a supported employment team, performance becomes an outcome of the critical sub-system of an effective team. Qualified individuals (e.g., job coaches, counselors, advocates, family members) must work together to create competitive paid employment for the individuals with MR to meet their goals.

The Individual Domain

The individual domain aims to improve individual performance through expanding expertise (Holton, 1999b). The essence of PI practice has been the improvement of individual human performance, particularly through expanded human expertise, which is believed to result in enhanced organizational performance (Holton, 1999a). The model suggests focusing on individual performance through optimizing learning and expertise (Holton, 1999a, 1999b). This optimization of learning not only takes place through training but also through non-learning interventions, such as incentives and consequences, feedback, information, work conditions and resources required for the individual to function in the system (Holton, 1999a, 1999b). Supported employment can use work redesign as a non-learning intervention to accommodate individuals with MR (an intervention that goes beyond the traditional HRD focus on training).

Conclusion

An effective model and infrastructure where HRD plays an important role in the work of individuals with MR is the underlying bridge needed to move people with disabilities and MR into an integrated paid employment environment. Holton's (1999a, 1999b) PI/HRD model is a system in which HRD can effect organizational change to improve both traditional aspects (career development and training and development) and non-traditional organizational learning when employing individuals with MR. Implementing SE requires the coordinated efforts of several groups, each with unique perspectives, needs, and responsibilities: employers who provide job opportunities; HRD providing career development, training and support; state and local agencies that fund, regulate and evaluate programs; parents

and advocates who choose among services and provide assistance outside the workplace; and persons with disabilities who choose whether or not to participate in particular jobs or programs (Bellamy et al., 1988).

References

- Bellamy, G. T., Rhodes, L. E., Mank, D. M., & Albin, J. M. (1988). *Supported employment: A community implementation guide*. Baltimore: Paul H. Brookes.
- Berkell, D. E. (1987). Vocational assessment of students with severe handicaps: A review of the literature. *Career Development for Exceptional Individuals*, 10, 61-75.
- Bolton, B., & Roessler, R. (1985). After the interview: How employers rate handicapped workers. *Personnel*, 62(7), 17-24.
- Chadsey-Rusch, J. (1986). Identifying and teaching valued social behaviors. In F. R. Rusch (Ed.), *Competitive employment issues and strategies* (pp. 273-287). Baltimore: Paul H. Brookes.
- Cook, J. A., & Rosenberg, H. (1994). Predicting community employment among persons with psychiatric disability: A logistic regression analysis. *Journal of Rehabilitation Administration*, 18(1), 6-22.
- Developmental Disability Act of 1984 -PL 98-527. (1984). *United States Statutes at Large* 98, 2662-2685.
- Drake, R. E., McHugo, G. J., Becker, D. R., Anthony, W. A., & Clark, R. E. (1996). The New Hampshire study of supported employment for people with severe mental illness. *Journal of Consulting and Clinical Psychology*, 64(2), 391-399.
- Federal Register (1984). *Developmental Disabilities Act of 1984*. Report 98-1074, Section 102 (11) (F).
- Gilbert, T. F. (1978). *Human competence: Engineering worthy performance*. New York: McGraw-Hill.
- Greenspan, S., & Shoultz, B. (1981). Why mentally retarded adults lose their jobs. Social competence as a factor in work adjustment. *Applied Research in Mental Retardation*, 2, 23-38.
- Hill, J. W., Wehman, P., Hill, M., & Goodall, P. (1985). Differential reasons for job separation of previously employed mentally retarded adults. *Education and Training of the Mentally Retarded*, 15, 179-186.
- Holland, J. (1985). *Making vocational choices: A theory of vocational personalities and work environments*. Englewood Cliffs, NJ: Prentice Hall.
- Holton, E. F. III. (1999a). Performance domains and their boundaries. *Advances in Developing Human Resources*, 1, 26-45.
- Holton, E. F. III. (1999b). An integrated model of performance domains: Bounding the theory and practice. *Performance Improvement Quarterly*, 12(3), 95-118.
- Holmes, T. (2005, July) Diversity in the workplace: Creating Workplace Opportunities for People with Disabilities. Retrieved October 6, 2005, from http://www.bostonworks.boston.com/diversity/062003/div_0603_/2.shtml
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin*, 97, 251-273.
- Konig, A., & Schalock, R. (1991). Supported employment: Equal opportunities for severely disabled men and women. *International Labour Review*, 130(1), 21-37.
- Lagomarcino, T. R., Hughes, C., & Rusch, F. R. (1989). Utilizing self-management to teach independence on the job. *Education and Training in Mental Retardation*, 24, 139-148.
- Leach, S. (2002). *A supported employment workbook*. London: Jessica Kingsley.
- Nisbet, J., & Hagner, D. (1988). Natural supports in the work place: A reexamination of supported employment. *The Journal of the Association for Persons with Severe Handicaps*, 13, 260-267.
- Ormel, J., Lindenberg, S., Steverink, N., & Verbrugge, L. M. (1999). Subjective well-being and social production function. *Social Indicators Research*, 46(1), 61-92.
- Paglino, P. (2001). Using a multisensory environment. London: David Fulton Publishers.
- Parent, W. S., & Everson, J. M. (1986). Competencies of disabled workers in industry: A review of business literature. *Journal of Rehabilitation*, 52, 16-23.
- Phelan, J. C., Link, B.G., Stueve, A., & Pescosolido, B. A. (2000). Public conceptions of mental illness in 1950 and 1996; Has sophistication increased? Has stigma declines? *Journal of Health and Social Behavior*, 41 (2), 188-207.
- Public Law 98-527: Developmental Disabilities Assistance and Bill of Rights Act. (1984). Washington, DC: 98th Congress.
- Public Law 99-506: Rehabilitation Act Amendments of 1986. (1986). Washington, DC: 99th Congress.
- Public Law 95-504: Rehabilitation Act Amendments of 1973. (1986). Washington, DC: 92th Congress.
- Rogan, P., Hagner, D., & Murphy, S. (1993). Natural supports: Reconceptualizing job coach roles. *Journal of The Association for Persons with Sever Handicaps*, 18, 275-281.

- Rosenberg, H., & Brady, M. P. (2000). *JOBS – Job Observation and Behavior Scale examiner’s manual*. Wood Dale, IL: Stoelting.
- Rosenberg, H., Cheyney, W., & Greenberg, B. (1991). Dropout prevention in vocational special needs education. *Career Development for Exceptional Individuals*, 14, 91-101.
- Roessler, R. T. (2002) Improving job tenure outcomes for people with disabilities: The 3M model. *Rehabilitation Counseling Bulletin* 45 (4) 207-212.
- Rummler, G., & Brache, A. (1995). *Improving performance: How to manage the white space on the organization chart*. San Francisco: Jossey-Bass.
- Rusch, F. R. (1986). *Competitive employment issues and strategies*. Baltimore: Paul H. Brookes.
- Rusch, F. R. (1990). *Supported employment: Models, methods, and issues*. Sycamore, IL: Sycamore Publishing.
- Rusch, F. R., Hughes, C., & Johnson, J.R., (1991). Descriptive analysis of interrelations between co-workers and supported employees. *Retardation*, 29, 207-212.
- Salzberg, C. L., Agran M., & Lignugaris-Kraft, B. (1986). Behaviors that contribute to entry-level employment: A profile of five jobs. *Applied Research in Mental Retardation*, 7, 299-314.
- Sitlington, P., & Easterday, J. (1992). An analysis of employer incentive rankings relative to employment of persons with mental retardation. *Education and Training in Mental Retardation*, 27, 75-80.
- Swanson, R. A., & Arnold, D. E. (1996). The purpose of human resource development to improve organizational performance in R. W. Rowden (ed.), *Workplace Learning: Departing the Five Critical Questions of Theory and Practice*. Higher and Adult Education Series. San Francisco: Jossey-Bass.
- U.S. Department of Census. (2000). *Population profile of the USA*. Retrieved October 16, 2004, from <http://www.census.gov/main/www/cen.2000.html>
- Von Beralanffy, L (1968). *General systems theory: Foundations, development, and applications*. New York: George Braziller.
- Wehman, P. (1986). Supported competitive employment for persons with severe disabilities. *Journal of Applied Rehabilitation Counseling*, 17 (4), 24-29.
- Wehmeyer, M. L., Agran, M., & Hughes, C. (1998). *Teaching self-determination to students with disabilities: Basic skills for successful transition*. Baltimore: Paul H. Brookes.
- Wehmeyer, M. L., & Kelchner, K. (1997). *Whose future is it anyway? A student-directed transition-planning program*. Silver Spring, MD: The Arc of the United States.
- Wright, G. N. (1980). *Total rehabilitation*. Boston: Little, Brown and Company.