



Video Testing, ADA and the Civil Rights Act of 1991

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Introduction

In the Application Guidelines for the Baldrige Performance Excellence Program there has been a section on Human Resource Utilization that includes training of employees, employee involvement, employee recognition, performance measurement and employee well being and morale. Interestingly, there is not a section on selection although there is recognition of the need for training needs analysis. How can you have a quality organization without selecting good people who can take advantage of the other aspects of the human resources system like training, recognition and the like? Perhaps, without exception, athletic teams do a more effective job of selecting successful "workers" than any other industry (through their tryout process). There could be a number of reasons for this but surely one is that everything evaluated in an athletic setting is observable, relevant and quantifiable. This means that the behavior evaluated is always observed directly, related directly to success in the job and quantified with a rating scale where judgments are made by trained observers. This job-relatedness and concentration on what the person can do leads to the basis of a very efficient human resources system that starts with effective selection and includes focused training and manpower planning. The "test," whether it be called a tryout, provides a model for what a good test should be.

There are three very different roles for testing if it is to contribute fully to organizational performance. First and most traditional is the ability of the test to select people who are likely to be successful at a particular job. The test may vary in this dimension and its success is defined by its validity coefficient. Second, however, and perhaps equally important to a test's validity is its ability to specify training needs for those individuals who may accept a position but clearly have to be trained further to reach a satisfactory level of performance. This second role for testing is especially important considering the changing workforce and the greater entry of female, minority and immigrant workers. Given this last point, the third role of an effective test is that it gives an accurate job preview to workers about to enter a particular field as well as a particular job. So, to be maximally effective, a test should be accurate or valid, should provide developmental or training needs information, and demonstrate an accurate picture of what a job will be like. These three dimensions of a good test will all be critical given the changing labor force over the next decade.

These three roles of a good test have been around for as long as testing has existed. Another more contemporary role for testing has evolved as a result of the Americans with Disabilities Act and fairness in testing issues. The Americans with Disabilities Act (ADA) has generated quite a bit of discussion in the business community, and specifically within human resources. While most of this discussion has been around the modifications to physical structures that businesses must make, one of the most important sections of the Act deals with employee selection. This means that businesses will now be forced to find selection systems that can be administered fairly to individuals with disabilities. Lastly, with the recent Civil Rights Act of 1991, tests are needed which are "fair" to all groups in the population, lead to no adverse impact, etc.

The type of test which best accomplishes these different roles is a work sample test. A work sample test can best be described as a test that demands a person perform tasks or activities which closely resemble tasks or activities which are a part of the job or position for which the person is being tested. A common example of these tests would be an aircraft flight simulator, commonly used to train or select pilots; clearly - an expensive and elaborate example. A simpler example would be a word processing test that asks a job applicant to demonstrate their capabilities in order to determine whether or not they should be hired for a position. Both these examples clearly show the three aspects of a good test. They accurately demonstrate a person's work

competencies, they provide developmental information, and they offer an accurate job preview to the test taker. And now with the use of computers, video, and the concept of job simulations, work sample tests have been developed to address the issues presented in the ADA and the new Civil Rights Act.

Work Sample Tests

In industrial and governmental organizations testing programs/work sample tests were developed in the early sixties to select managers. These testing programs have now been used for testing - not only supervisory personnel but salespeople, executives, police officers, teachers and dozens of other positions for which job-related information about an individual can help in the selection of people. The rationale behind a job sample test is that for any situation the ability to perform specific tasks is a major determinant of any success. For example, the success or failure of a basketball player is a function of how well he or she can perform skills like dribbling, shooting, rebounding and passing. For a manager, the logic is the same but the specific tasks are different. Organizing and planning, leadership, communication skills, decision-making and other skills all contribute to the likely success of the manager.

The design of such a program can be quite complex. An analysis of the positions for which the test is to be designed must be undertaken. This job analysis is typically a combination of interviews and questionnaires with incumbents in a position and managers of that position to find out the tasks necessary for success. Work sample tests are then developed which call for individuals to actually perform tasks critical for job success. In-basket exercises, role plays, group discussions, problem analysis tasks, oral presentations and press conferences might all be examples of work sample tests if they were made relevant to a particular position. Evaluators are trained for a period of approximately three days in how to evaluate people performing these job-related tasks. This training usually consists of knowledge of the particular work sample tests or exercises, systematic practice in observing job-related behaviors in exercises and practice in drawing conclusions that are based on the behavior observed. Individuals are then tested using these exercises by having the trained evaluators document and summarize all observed work-related behaviors. This usually takes two days but can take as long as a week or more depending on the complexity of that particular program.

Over a thirty-year period the conclusions drawn concerning the effectiveness of these types of tests have been extremely positive. They have proven to be legally defensible in court, highly valid, and an excellent way to provide developmental information and a clear job preview. Hundreds of research studies have been carried out which speak quite eloquently to the use of the process in virtually every type of organization. The only consistent negative comment over the years has been the cost associated with such a program. Because of the costs associated with developing these types of work samples and the time associated with the administration of the testing program, costs have ranged from \$500 per person to \$5,000 per person depending on a number of factors such as length of the program, travel, facilities and the like. In any case, for positions in which there are large numbers of employees and high turnover, this method can be quite expensive even though it embodies the three aspects of a good test quite well.

New technology, namely computers and video, have offered an excellent, low cost, alternative. For positions like first line supervisor, customer service representative, salesperson or bank teller, a test that can still provide good information for developmental purposes, a clear job preview, and be valid is of critical importance. Video-based tests have been developed which take advantage of new technologies as well as meet the criteria for establishing a good test.

Description of Video-based Testing

Using available technology, individuals being tested for jobs view vignettes of various job-related situations on a video monitor. At a critical point in each simulation, the participant is asked to choose one of four courses of action corresponding to what he/she would do if they were in the situation. Following this selection, the participant will see a response to the action that he/she selected. Then, the participant is asked again to choose one of four courses of action in response to the subsequent action. After the fourth choice is presented, the participant then must mark her/his answer on an answer sheet. The use of video allows for administration of the test to more than one person at a time. Participants' responses are entered into a computer and results are instantly fed back to the organization. The results show how each individual performed in relation to the job demands. The feedback also indicates how well the person would perform on the job and it highlights specific skills that would benefit from further development, as well as provides performance development strategies that the person can take back to the job. The immediate results enable individuals to begin learning and improving

rapidly. These video based assessment systems can provide the hiring managers with customized interview questions (including evaluation criteria) based on the participants' responses to the video vignettes.

These tests have been developed for a large number of positions and can be administered in a one-hour period of time at any location where a video monitor, a VCR, and a personal computer are available. The steps are very simple and are described below.

- Individual(s) watches video tape depictions of critical job situations.
- Individual(s) responds to multiple choice questions regarding actions he/she would take.
- Responses are input into local computer.
- Local computer calls main computer.
- Main computer scores test(s).
- Main computer transmits pertinent information back to local computer.
- Local computer prints out feedback report(s).
- To be used for selection and diagnosing developmental needs.

After the completion of the test tape, the rest of the entire process takes no longer than three minutes. All the systems have been designed to assess a person's skills and abilities. The test can be used as both a selection and development tool for any position where job-related skills are important for successful performance.

All these types of systems are developed in conjunction with a number of different organizations. Each of them provide employees and other job experts for job analysis interview, reviewing scripts, and validation information.

A validation study is then designed to demonstrate the degree of correlation between employees' scores on the tests and their current on-the-job performance. Better on-the-job performers are found to score higher on the test than lower performers. The relationship between on-the-job performance ratings and the test results were overall very high and significantly better than the results achieved using traditional interviews for selection purposes.

Video Testing and the Americans with Disabilities Act (ADA)

The Federal Vocational Rehabilitation Act of 1973 forbids government contractors and subcontractors from discriminating against the handicapped. The Americans with Disabilities Act now expands that coverage to include private employers who were previously exempt under this law. The ADA is designed to end discrimination against the disabled in employment, public services, public accommodations and telephone services.

Description of the ADA

One of the most important aspects of the ADA deals with the actual definition of a disability. The ADA defines a disability as much more than a physical handicap. To be disabled, an individual must 1) have a physical or mental impairment that substantially limits one or more life activities, 2) show a record of such impairment, or 3) be regarded as having such an impairment.

The definition of an impairment is defined much more broadly. The term includes such disabilities as orthopedic disorders; visual, speech and hearing impairments; cerebral palsy; epilepsy; muscular dystrophy; mental retardation; emotional illness; specific learning disabilities (dyslexia); and others.

Section 1630.11 of the regulations addresses the administration of pre-employment testing with regard to reasonable accommodations. This section states, "It is unlawful for a covered entity to fail to select and administer tests concerning employment in the most effective manner to ensure that, when a test is administered to a job applicant or employee who has a disability that impairs sensory, manual or speaking skills, the test results accurately reflect the skills aptitude, or whatever other factor of the applicant...rather than reflecting the impaired sensory, manual or speaking skills..."

There are many different testing methodologies available today. One of these, video testing, provides an alternative methodology which helps address most of the employment testing issues brought up by the ADA.

Overall, video testing systems are in accordance with this new regulation and provide an excellent alternative to more traditional types of assessment (i.e., paper-and-pencil tests) that do not comply as well.

How Video Testing Addresses the ADA

Again, the ADA states that pre-employment tests must be able to be administered to disabled individuals or be shown to be an accurate simulation of the requirements of the job. For example, a test may be administered via an audio tape to an applicant who will be required to answer the phone and respond to the callers' verbal cues. In this case, the test would not need to be modified for the deaf.

Regarding physical impairments, video testing is an excellent alternative for addressing impaired applicants when compared to other testing methods. Since the test is presented both audibly and visually, the video equipment allows for adjustments to be made for those applicants. For example, volume adjustments, use of earphones, screen magnification equipment, and the use of an administrator to help record the applicants' choices are just some of the accommodations that can be made. In addition, when the physical impairment can not be dealt with (i.e., total blindness) then video testing becomes an excellent simulation of the demands of the job. In other words, the totally blind person will need to respond to only audio cues on the job, and video testing allows the applicant to respond to these same types of audio cues during the assessment phase.

Regarding the other disabilities that the ADA addresses (i.e., learning disabilities), video testing again provides an excellent method for pre-employment screening. One of the major problems associated with these types of disabilities involves reading. In the past, most screening instruments have required the applicant to read during the assessment phase even though reading is not a major part of the job, or more time is given for reading on the job than during the testing phase. Again, the use of video helps eliminate reading ability as a confound when measuring other abilities necessary for the job. Lastly, the Act addresses the issue of illiteracy and suggests that assessment methods will have to address this problem in order to be effective. Video testing, for the reasons just mentioned, also helps control for this issue.

Clearly the use of video assessment provides a low cost, highly accurate test that addresses very carefully the employment testing issues in the Americans with Disabilities Act.

Video Testing and the Civil Rights Act of 1991

This new law prevents an employer from adjusting the scores, using different cutoff scores, or otherwise modifying the results of employment tests on the basis of race, color, religion, sex, or national origin. This stipulation will have a significant impact on employers who currently use tests for which there are different norms for different groups. The above leads to the need for a test that is predictive for all groups without disparate impact (e.g., different norms/cutoff scores for different groups). Video testing provides the means to accomplish this goal.

First, what is adverse impact? Adverse impact refers to a substantially different rate of selection in hiring, promotion, or any other employment decision that works to the disadvantage of members of a race, sex, or age group. A "substantially different rate" is typically measured by the "four-fifths rule." A selection rate for any race, sex or protected group which is less than four-fifths (or 80%) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded as evidence of adverse impact.

Today most testing instruments lead to adverse impact. Almost every paper-and-pencil test has adverse impact associated with it. With the Civil Rights Act and court cases more organizations will be forced to look for instruments with no adverse impact.

One of the major contributors to adverse impact in a test is the amount of reading that is necessary to review the questions and alternatives. Through the use of video to act out the stimuli and the alternatives the need for reading has been decreased. This has helped create testing systems that do not lead to adverse impact.

Besides establishing similar norms for various subgroups a test must also be "fair" to all groups. The term "fair" not only means that different groups perform similarly on the test but also means that the test must be equally predictive for all groups. Standard test fairness analyses conducted on these video systems show that the tests are equally predictive for various groups in the population.

Conclusion

In summary, technology, namely the computer and video has afforded an opportunity to develop tests which are extremely cost-effective. In addition, they have high validity, offer realistic job previews as well as developmental needs for the individual job applicant, are fair to all subgroups, meet the conditions for employment testing set forth by the ADA, and help control for adverse impact. Given a younger workforce, a workforce with many more minorities, as well as immigrants for whom our world of work will be strange, a good means of testing will continue to be important over the next decade and beyond.

It seems impossible to develop a truly quality organization without giving thought to the selection instruments which can evaluate an individual's potential to do the kinds of tasks necessary to succeed at a job. Unless this is done fairly and accurately based on the true abilities of the individual none of the other aspects of the human resources system can work. The development of an organizational meritocracy must have as its cornerstone the proper selection of individuals based on job-related factors. This is not only the proper mode from a legal standpoint but a logical one as well. Quality organizations are made up of quality people.