



SkillSeries Tests

HR•Assessments®

Developed by J. M. Llobet, Ph.D.

Administrator's Manual



Table of Contents

HR•Assessments® Products: An Investment in Your Company's Future	4
Use of Assessment Products as “Tools”	4
Legal Aspects of Assessment Use and Administration	4
Assessment Products and “Adverse Impact”	5
Federal Laws	5
Title VII	5
The Americans with Disabilities Act	6
Recordkeeping Requirements	6
State and Local Laws	6
Assessment Selection and Follow-Up Procedures	7
Selection	7
Monitoring	7
Validation	7
Scoring	7
Pinpointing Skill Competence for Employment Excellence	8
Description of the SkillSeries™ Tests	9
Analyzing Skills	9
Assembly Skills	9
Attention to Detail Skills	9
Filing Skills	10
Grammar Skills	10
Inspection Skills	10
Logic & Reasoning Skills	11
Math Skills	11
Proofreading Skills	11
Reading Comprehension Skills	12
Spelling Skills	12
Vocabulary Skills	12



Table of Contents (continued)

Using Job Analysis to Justify Use of Assessments and Their Sections	14
Administration Instructions for Paper Tests	16
Scoring Instructions For Paper Tests	17
Administration Instructions for Web-based Tests	17
Scoring Instructions for Web-based Tests	18
Interpretation and Use of Test Scores	19
Norms	19
Validity	33
Validity Studies	33
Giving Feedback and Discussing Test Scores	35

To ensure that you are obtaining the full benefits available to you from the use of HR•Assessments® products, please read all information contained in this manual carefully. By using this assessment product, you are acknowledging that you have read and understand the general guidelines provided in this manual, and that if you have any specific questions, you have referred them to a competent testing and/or legal expert for advice. The test developer and publisher do not assume liability for any unlawful use of this product.

The test developer and publisher do not assume any responsibility for the employer's use of this test or any decision the employer makes which may violate local, state or federal law. By selling this test, the publisher is not giving legal advice.

While HR•Assessments® are designed to help predict various aspects of human behavior, score results are presented in terms of probabilities. False Positives and False Negatives are expected. EDI and the test developer are not liable for test taker, applicant or employee behaviors.



HR•Assessments® Products: An Investment in Your Company's Future

The decision to use assessment products in the employment process is one that can be very beneficial to your company in many ways. A well-designed, properly validated assessment, when used in conjunction with other employment screening tools, can save your company from investing training resources in an applicant who is not suited to perform the job for which he or she was hired, and, as a consequence, can help protect your company from negligent-hiring lawsuits.

Each HR•Assessments product has been researched and developed by testing professionals, which includes experienced industrial psychologists.

Use of Assessment Products as “Tools”

Validity studies of the assessment products we offer have shown them to be predictive of job performance and therefore quite useful during the selection process. It is important to remember that assessments should be used in conjunction with other, equally important employment screening tools – such as criminal background checks, work histories and employer references – to present a balanced picture of the particular job candidate. Only when used in coordination with one another will you be able to truly determine a “fit” between the candidate and the particular job for which he or she is applying.

Employment assessments, as defined in this manual, can be of several different varieties, including trustworthiness or integrity assessments, skills-oriented assessments and personality assessments. Each assessment can center on one of these elements, or may include several different components, assessing a variety of factors. Choosing the proper assessment product for your needs is a key factor in making your selection process more effective.

Legal Aspects of Assessment Use and Administration

Although employment assessments have been in use for more than 40 years, their use became more prevalent after the passage of the Employee Polygraph Protection Act (EPPA) of 1988, which made it illegal for most private employers to use polygraph examinations as a routine pre-employment screening tool. Employment assessments that are not prohibited by the EPPA are designed to give the employer a legal way to gauge an employee's job-related skills and personality traits as an alternative to the polygraph test. Whereas the polygraph test is designed to monitor an applicant's physiological reactions to certain questions, the employment assessments seek to gain information on the job candidate through a series of questions designed to measure job-related attributes.

Today, the use of employment assessments continues to increase. Many of the country's largest corporations use such screening devices on a regular basis, and have found great success in using them to hire and promote the best candidates.



Assessment Products and “Adverse Impact”

A common misperception of these assessments is that they all tend to discriminate against certain classes of applicants, in violation of state and federal laws against discrimination in employment decisions. In fact, this is not the case. Although there is evidence of poorer performance by some members of protected classes on some skills tests that include language and mathematical components, the use of such tests is still justified, so long as the skills assessed by the test are essential for the successful performance of one or more of the job's key functions. In addition, researchers have found no evidence that well-constructed personality assessments discriminate on any unlawful basis.

However, it is incumbent upon employers who use assessment products to continually monitor selection procedures to ensure that no “adverse impact” is occurring in the overall selection process. Adverse impact is defined as a situation in which there is a substantially different rate of selection in hiring, promoting or other employment decisions that works to the disadvantage of members of a race, sex, or ethnic group. If adverse impact does occur, the employer needs to be able to demonstrate the job relatedness of the selection process. For further guidance in this area, read the *Assessment Selection and Follow-Up Procedures* section of this manual.

Federal Laws

There are federal laws and regulations governing the use of “selection” tools, such as employment assessments, insofar as they have any “adverse impact” on the employment opportunities of protected classes of individuals. Some of the more subtle aspects of these laws as they apply to the selection process are discussed in the section of this manual titled, *Using Job Analysis to Justify Use of Assessments and Their Sections (Legal Implications)*.

Title VII

Title VII of the Civil Rights Act of 1964 (Title VII), covering employers with 15 or more employees, prohibits discrimination in employment decisions on the basis of race, sex, color, religion and national origin. Title VII authorizes the use of “any professionally developed ability test, provided that such test, its administration or action upon the results, is not designed, intended or used to discriminate” on any unlawful basis. In 1971, the U.S. Supreme Court, in *Griggs v. Duke Power Co.* (401 U.S. 424), adopted the standard that employer practices that had an adverse impact on minorities and were not justified by a business necessity violated Title VII. Congress amended Title VII in 1972, adopting this legal standard.

As a result of these developments, the government sought to produce a unified governmental standard on the regulation of employee selection procedures because the separate government agencies had enforcement powers over private employers, and each used different standards. This resulted in the adoption of the Uniform Guidelines on Employee Selection Procedures (Guidelines), codified at 29 CFR Part 1607, which established a uniform federal position in the area of prohibiting discrimination in employment practices on the grounds of race, color, religion, sex or national origin, and applies to all public and private employers covered by Title VII, Executive Order 11246, the State and Local Fiscal Assistance Act of 1972, the Omnibus Crime Control and Safe Streets Act of 1968, and the Intergovernmental Personnel Act of 1970.



Highlights of the Guidelines include:

Provision of a uniform set of principles governing use of employee selection procedures that is consistent with applicable legal standards.

Setting out validation standards for employee selection procedures generally accepted by the psychological profession.

The Guidelines do not require a validation of the selection device unless evidence of adverse impact exists. It is important to note also that compliance with the Guidelines does not remove the affirmative action obligations for assessment users, including federal contractors and subcontractors.

The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) provides that an employer “shall not conduct a medical examination or make inquiries of a job applicant as to whether such applicant is an individual with a disability or as to the nature or severity of such disability.” (42 USC Sec. 12112(d)(2)(A); see also 29 CFR Sec. 1630.13.) Inquiries into a person’s disabilities are prohibited at the pre-offer employment stage, except in a very narrowly defined situation when the applicant has *voluntarily* disclosed a medical condition requiring accommodation. The ADA protects disabilities, not a characteristic that an employer may consider to be a personal flaw or undesirable aspect of an applicant’s personality. The ADA does not prohibit inquiries into such personality attributes as propensity for honesty, ability to get along with others, organizational skills or management skills, to cite a few examples. No question or series of questions designed to elicit information about a person’s mental impairment (as defined by the ADA), or questions that even would tend to elicit such information, should appear on an assessment product. Each HR•Assessments product has been carefully reviewed under this standard to avoid any conflict with ADA guidelines.

Recordkeeping Requirements

Various federal laws require employers to retain tests and test results for at least one year from the date the test is administered or from the date of any personnel action relating to the testing, whichever is later.

State and Local Laws

Due to the wide variety, complexity, and ever changing nature of state laws, it is impossible to summarize each state’s requirements in this brief overview. If you are unfamiliar with the state and local laws governing the use of screening devices applicable in your locale, consult with a qualified labor law attorney or testing specialist who may provide competent guidance on this topic.



Assessment Selection and Follow-Up Procedures

Selection

Generally, when selecting an assessment or any other selection tool, you should choose one that has been designed specifically to measure the skills or traits necessary for the position in question. It is recommended that a thorough job analysis be performed to determine the connections between job functions and the attributes the assessment product is designed to measure.

Monitoring

Monitor your selection process to ensure compliance with all applicable federal, state and local laws, checking your selection process for evidence of adverse impact. This should be conducted on a continual basis. HR•Assessments products include testing logs that can be used to record each assessment taker's scores, as well as other important data that may be used to compute your own norms and adverse impact statistics.

Validation

Should your monitoring results indicate that adverse impact is occurring in the selection procedures, you should determine in which component of the selection process it is happening. If the use of a certain assessment product is found to be the cause, you will need to conduct a validation study of the assessment. Qualified testing professionals may be contacted to help in conducting a validity study. These professionals will be able to help determine whether the assessment is the cause of the adverse impact and whether the assessment is emphasizing a bona fide occupational qualification for the job. In some instances, assessments that in some context may be considered discriminatory may be lawful to use in others, so long as the assessment is centered on a bona fide occupational qualification.

Scoring

Cutoffs and suggested “pass” or “fail” scores are not provided with these assessments. Instead, norms and, in some instances, average assessment scores for various levels of job performance are provided. This information is provided for the elements the assessment is designed to measure. This information is a result of the testing universe used in the validation studies performed by HR•Assessments, and is for demonstrative purposes only. Assessment results always should be interpreted, along with other information gathered through your selection process, to ensure that you get a complete picture of the job candidate or employee. It is recommended that you administer the assessment to your current employees so you may develop your own company-specific norms for assessment performance. These norms then can be used as benchmarks during your assessing and selection process.



Pinpointing Skill Competence for Employment Excellence

Like all businesses, your company's success depends on how well employees perform the tasks in their job descriptions. As today's companies react to new technology and a changing business environment, job descriptions also evolve. For the employee this can mean mastering new tasks, multiple and changing work assignments, and interdepartmental teamwork. Consequently, associating a traditional group of skills with a specific position may no longer apply. To secure a competitive advantage, companies need to accurately define their employment task requirements and hire individuals who can best perform them.

Our dynamic business climate makes pre-employment testing more important than ever. It's the most accurate method of screening for skill competence. Pre-employment testing saves your company time, money and aggravation associated with "bad hires," and identifies potential top performers. However, finding pre-employment tests that most accurately match the unique requirements of the jobs you need to fill can be a challenge.

Build Your Own Employment Testing Program

SkillSeries is a battery of short, inexpensive tests that provide employers with an efficient, cost-effective way to build a custom-designed testing program. Each test takes only eight minutes or less to administer and measures a basic workplace skill. Employers can use the skill tests individually, or mix and match them to come up with a unique test mix for each of the jobs performed in their company. The applicant or employee is tested only for those skills he or she actually performs on the job – so there's no wasted testing time or cost.

SkillSeries Consists of Tests to Measure the Following Skills:

1. Analyzing
2. Assembly
3. Attention to Detail
4. Filing
5. Grammar
6. Inspection
7. Logic & Reasoning
8. Math
9. Proofreading
10. Reading Comprehension
11. Spelling
12. Vocabulary



HR•Assessments SkillSeries

Filing Skills

Developed By J. M. Libras, Ph.D.

Name: _____ Test: _____ SCORE: _____

STOP. DO NOT BEGIN UNTIL YOU ARE INSTRUCTED TO DO SO.

1. **Directions:** Circle the correct answer for each question. You will have 2 minutes to complete this test.

1. **Directions:** Circle the correct answer for each question. You will have 2 minutes to complete this test.

1. **Directions:** Circle the correct answer for each question. You will have 2 minutes to complete this test.

4. Filing Skills: This test consists of 20 problems that measure how rapidly and accurately applicants can file names and dates. This test is appropriate for jobs that require filing skills. Time limit is 2 minutes.

HR•Assessments SkillSeries

Grammar Skills

Developed By J. M. Libras, Ph.D.

Name: _____ Test: _____ SCORE: _____

STOP. DO NOT BEGIN UNTIL YOU ARE INSTRUCTED TO DO SO.

1. **Directions:** Circle the correct answer for each question. You will have 5 minutes to complete this test.

1. **Directions:** Circle the correct answer for each question. You will have 5 minutes to complete this test.

1. **Directions:** Circle the correct answer for each question. You will have 5 minutes to complete this test.

5. Grammar Skills: This test is made up of 20 questions. Each question consists of four sentences. For each question, applicants are asked to identify the one sentence that is most grammatically correct. This test is appropriate for most jobs that require the ability to write and/or speak clearly, using proper grammar. Time limit is 5 minutes.

HR•Assessments SkillSeries

Inspection Skills

Developed By J. M. Libras, Ph.D.

Name: _____ Test: _____ SCORE: _____

STOP. DO NOT BEGIN UNTIL YOU ARE INSTRUCTED TO DO SO.

1. **Directions:** Circle the correct answer for each question. You will have 2 minutes to complete this test.

1. **Directions:** Circle the correct answer for each question. You will have 2 minutes to complete this test.

1. **Directions:** Circle the correct answer for each question. You will have 2 minutes to complete this test.

6. Inspection Skills: This test consists of 10 problems that measure how quickly and accurately applicants can identify defects in objects. This test is appropriate for jobs requiring quality inspections and/or the ability to spot defects or errors. Time limit is 2 minutes.



HR•Assessments SkillSeries

Logic & Reasoning Skills

Developed by J. M. Liden, Ph.D.

NAME: _____ SEX: _____ SCORE: _____

DATE: _____

STOP: DO NOT BEGIN UNTIL YOU ARE INSTRUCTED TO DO SO.

1. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

2. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

3. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

4. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

5. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

6. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

7. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

8. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

9. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

10. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

11. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

12. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

13. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

14. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

15. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

16. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

17. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

18. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

19. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

20. If a manager wants you to work on your presentation skills, communication skills and management skills, which one of the following should benefit you the most?

☐ Developing computer software ☐ Developing software management

- 7. Logic & Reasoning Skills:** This test is made up of 20 work-related problems. Applicants are asked to complete as many of the problems as possible, demonstrating their ability to think logically, quickly and accurately during “real life,” on-the-job situations. This test is appropriate for most jobs that require the ability to think clearly and solve problems using careful and logical thought processes. Time limit is 8 minutes.

HR•Assessments SkillSeries

Math Skills

Developed by J. M. Liden, Ph.D.

NAME: _____ SEX: _____ SCORE: _____

DATE: _____

STOP: DO NOT BEGIN UNTIL YOU ARE INSTRUCTED TO DO SO.

1. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

2. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

3. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

4. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

5. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

6. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

7. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

8. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

9. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

10. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

11. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

12. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

13. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

14. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

15. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

16. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

17. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

18. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

19. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

20. 1500 plus 1500 is equal to how many dollars?

☐ 3000 ☐ 1500 ☐ 1500 ☐ 1500

- 8. Math Skills:** This test contains 20 problems that require applicants to perform basic math functions such as addition, subtraction, multiplication, division and percentages. This test is appropriate for jobs that require the use of basic mathematical concepts. Time limit is 4 minutes.

HR•Assessments SkillSeries

Proofreading Skills

Developed by J. M. Liden, Ph.D.

NAME: _____ SEX: _____ SCORE: _____

DATE: _____

STOP: DO NOT BEGIN UNTIL YOU ARE INSTRUCTED TO DO SO.

Dear Valued Employees:

Your work to build and maintain a “financial services” organization has resulted in a tremendous success for our company. Sales and profits are up and have been very impressive by the level of cooperation and enthusiasm. You have all worked, to make this organization a tight-knit, effective and smoothly functioning company.

There’s been noticeable improvements in employee interaction with customers and colleagues. The fact that these gains took place during a customer’s busy time is a testament of which to be proud. Enthusiasm, spirit, helpfulness and willingness to make diversity work to our advantage is the true rewards of everyone’s efforts and teamwork.

I would like to take this opportunity to formally congratulate you all for a job well done. Please continue with the excellent effort you have made. Your hardwork and dedication are truly appreciated.

Sincerely,

R. Newman
Robert Newman
President

- 9. Proofreading Skills:** This test is presented in the form of a brief letter. The letter has 20 errors related to spelling, grammar and punctuation. Applicants are asked to read the letter and circle the errors they encounter. This test is appropriate for jobs that require proofreading written material. Time limit is 3 minutes.



One of the primary advantages of the SkillSeries Tests is their ease of administration and scoring. Quick and clear scoring procedures make the test accessible to all businesses, regardless of the size or the industry. What's more, test administration is accomplished in a short time without sacrificing the test's technical qualities (reliability, validity).

Another important advantage of the SkillSeries Tests is the ability to mix and match different tests to develop a customized test battery specific to your needs. Each job requires its own set of unique skills. The SkillSeries Tests offer an economic means to tailor your testing program depending upon the specific requirements of the job.

The SkillSeries Tests should provide a significant return on investment for its users. A comparison of the cost of these tests and the hidden costs associated with the recruitment and promotion of ability-deficient applicants will reveal that personnel testing is cost-effective. Indeed, the training and time investment in employees who turn out to be unqualified represent a very significant hidden cost.



Using Job Analysis to Justify Use of Assessments and Their Sections (Legal Implications)

From a legal standpoint, if a test is to be used for selection or promotion, it is important that users of the test take the necessary actions to establish a clear connection between the job tasks and the occupational environments measured by the test. This relevance should exist to meet the principles outlined in the Uniform Guidelines on Employee Selection Procedures (1978) and other federal government employment-related legislation, such as Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, and the American with Disabilities Act of 1990.

The tasks that are crucial or essential to the job in question should be identified first. Then, the occupational environment that matches the job in question can be determined. This process should be documented carefully to justify the appropriateness of the test administered in the employee selection process.

The following are examples that indicate the relationship between job tasks and the occupational environments described in this manual:

Task	Skill Series Test
Verifies basic numerical and text information presented in charts and spread sheets.	Analyzing Skills
Assembles products based on specific assembly instructions.	Assembly Skills
Check to ensure that the purchase order number on the order slip is the same as the number on the incoming inventory package.	Attention to Detail Skills
Files employee information by name and/or identification number.	Filing Skills
Inspects finished products for defects before preparing them for shipment.	Inspection Skills
Uses information from various sources to draw correct inferences.	Logic & Reasoning Skills
Performs basic mathematical functions such as addition and subtraction to verify the accuracy of financial statements.	Math Skills
Proofs correspondence for errors in spelling, punctuation and grammar.	Proofreading Skills
Reads customer correspondence and takes necessary actions.	Reading Comprehension Skills
Writes memoranda and other correspondence as needed.	Spelling Skills, Grammar Skills, Vocabulary Skills
Communicates verbally with coworkers, manager and/or customers.	Grammar Skills, Vocabulary Skills



As a general guideline for compliance with federal discrimination and disability laws, test users should not subject test takers to any adverse employment decisions based on a test result, unless the test result and other factors considered in the decision-making process reveal that the person does not possess qualifications that are crucial or essential to the job in question. To illustrate, if a test taker performs poorly on a test section designed to measure inspection skills, and inspection skills are not crucial or essential to the position for which the test taker is being considered, the test result should not serve as a basis for excluding the test taker from the position. Similarly, if a test result indicates that a test taker is unable to perform certain physical tasks that are not crucial or essential to the position at issue, the test taker should not be excluded from that position on the basis of the test result.¹ Test users can avoid such a scenario altogether by carefully identifying the tasks that are essential to the job position at issue, and administering only those tests or test sections that are appropriate and relevant to the position's requirements.

Test sections measuring proficiency in the English language also should be administered in accordance with these principles. Thus, if spelling, grammar, vocabulary or reading comprehension skills are not essential to a job position, a test taker should not be subjected to an adverse employment decision based on poor test results in those areas. Requiring employees or applicants to be fluent in English may constitute national origin discrimination in violation Title VII of the Civil Rights Act if the requirement is not justified by business necessity or directly related to job performance. There are some limited exceptions to this rule for jobs involving dangerous work requiring a heightened understanding of written or verbal safety instructions in English, or service positions that require significant communication in English with the public. Test users should consult with an attorney before subjecting any test taker to an adverse employment decision on the basis of English language deficiencies.

¹ If the test taker's ability to perform a particular physical task is essential to the job position at issue, the Americans with Disabilities Act may require the test user to provide certain accommodations to facilitate the test taker's performance of the task at issue. Test users should consult an attorney before making any adverse employment decision based upon a test taker's physical inability to perform a task measured by a test result.



Administration Instructions for Paper Tests

Please read the following instructions before administering one or more of the SkillSeries Tests:

1. Decide on the number and kinds of assessment instruments to be used in evaluating applicants or employees. The SkillSeries Tests may be one of them. Other valuable evaluation instruments may be the application form, an employment interview, reference checks and other tests.
2. Decide beforehand on the tests that will be administered. Make sure to select only job-related tests as described in the previous section of this manual titled, *Using Job Analysis to Justify Use of Assessments and Their Sections*.
3. Before testing, be familiar with the test and testing instructions. Be prepared to answer any questions that may be asked.
4. The test should be administered in a quiet room, free from distractions and interruptions.
5. For paper tests, provide all test takers (applicant or employee) with a ballpoint pen to ensure clear markings on the answer sheets. Instruct them to press firmly when marking their answers. Distribute the test and have the test taker complete the information on the top of the test sheet (i.e., name, Social Security number and date).
6. Introduce the test to the test taker. Say, "This test is designed to evaluate the basic skills required by the job. You will have a specific number of minutes to complete the test."

Test users who are subject to the Americans with Disabilities Act of 1990 may be required to provide accommodations to disabled test takers who need assistance during the testing process. This may include, for example, relaxing the time limits of timed tests, offering visual or audio assistance, or providing special lighting or seating arrangements. Test users who are uncertain of their obligations under the Americans with Disabilities Act should consult an attorney if an accommodation is requested in the testing process.

7. Have the test taker (applicant or employee) read the test instructions. The test taker should read only the instructions. Do not let the test taker read any of the actual questions until you say, "You may begin."
8. Time the test administration. Give the test taker the exact amount of time specified for the test that is being taken.
9. When the test taker's time for a test is up, say, "Stop!" Do not let the test taker answer any more questions in that test.
10. Repeat steps 8 to 10 for each of the SkillSeries Tests you have found to be job-related and have decided to administer.
11. When you are done with all the tests, say "Thank you. We appreciate your taking the time to complete this test."



Scoring Instructions for Paper Tests

Scoring the SkillSeries Tests is straightforward and time-efficient. Follow the steps listed below:

1. Tear off the perforated tab on the top of the test. Carefully separate the test sheet from the answer sheet.
2. You will notice that each SkillSeries Test has its own set of scoring instructions printed at the top of the answer sheet. Follow these instructions to score each test.

Administration Instructions for Web-based Tests

Please read the following instructions before administering this test.

To access the Online Testing website:

Make sure to be using Internet Explorer to access the site

1. Open your web browser and go to <http://mytests.hrdirect.com>
2. Click **Administrator Login**
3. Enter the user name and password we've provided you via e-mail.

Step 1 – Create applicant(s)

It is important that you complete this step first as most of the other screens will not be functional until applicant names have been entered into the system.

In the Applicant Setup tab, fill out the form with the applicants information and click the **Save** button at the bottom left of the page. You should receive the message "You have successfully created a new applicant." If you wish to create more applicants, click on the **Create New Applicant** button at the bottom of the page for a blank form and don't forget to click the **Save** button after entering each applicant.

Step 2 – Assign a test to an applicant

Click the "Assign Test" tab and select the applicant you would like to assign a test to from the drop down list. Below you will see a list of tests that are available to the selected applicant. To the right of each test is a link to view their respective Administrator's Manuals. Click the checkbox next to the test you wish to assign, then click the **Assign Test** button at the bottom of the page.

Step 3 – Administer a test

Please inform your applicants:

1. Take the test using **only** Internet Explorer.
2. Make sure pop-up blockers are inactivated as the system will open a new screen.
3. Do not use the back button on the task bar during the test, as this will kick the applicant out of the test.

Click the "Administer Test" tab. Select an applicant, with previously assigned tests, from the drop down list. Select the test that you want to administer. You may administer the test in one of three formats:

The **Begin Test Now** button will start the test immediately.

The **Send Email** button will email an applicant the URL to our testing site along with a unique Session ID for them to enter to take the test.

The **Print Access Info** button will printout the URL to our testing site along with a unique Session ID, for the applicant, to enter to take the test.



Scoring Instructions for Web-based Tests

All web-based tests are scored automatically. Please read the following instructions to view the scores of a test.

View Test Results

Once a test has been completed, log in as an administrator and click the “Test Results” tab. You may view test results in one of two ways:

1. Select the applicant’s name from the “Applicant Name:” drop down list and click the **Show Tests for Applicant** button. This presents all tests taken by the selected applicant. Click on one of the tests to present its results.
- or-
2. Select the test from the “Test Name:” drop down list and click the **Show Applicants for Test** button. This presents all applicants who have taken the selected test. Click on the applicant’s name to present test results.

At any time in the future you may go back and view past applicants’ test results. They are saved in our system indefinitely.

Interpreting the Test Results

There are five tabs on a test’s results page:

Test Scores: Presents raw score, corresponding percentile with interpretive text and the average score for each test scale.

Test Score Graphs: Presents the same information as Test Scores along with the graphical view of the corresponding percentile score.

Interview Questions: Presents suggested follow-up questions to help you further evaluate the candidate’s responses to particular test items. If the test does not include this feature, clicking on this tab will result in the following message: “There are no follow-up interview questions for this test.”

Candidate Responses: Lists each test question along with the applicant’s response. If a test includes multiple scales, the test questions and applicants’ responses are separated by Scale.

Utilities: Allows you to change your online testing password and print the various test result sections.



Interpretation and Use of Test Scores

Use the test score to evaluate the test taker. An applicant/employee with a low test score indicates that there is a strong probability that he/she possesses limited ability in the skill area the test assesses. A high test score indicates there is a strong probability that the applicant/employee possesses a high level of ability in the skill area measured. For example, a score of 5 on the Math Skills test indicates the applicant/employee is likely to possess limited ability in performing basic mathematical calculations. Conversely, a score of 20 on the same test indicates the applicant/employee is likely to possess a high level of this ability.

Norms

Norms also can provide a point of reference regarding the relative test performance of each test taker. Norms represent average scores obtained by different samples of test takers. These norms can be compared to those of your applicants or employees to ascertain their relative standing.

Tables 1 to 12 on the following pages contain norms obtained from studies conducted to validate the SkillSeries Tests. Tables are provided for each individual test. Please find the tables that correspond to the SkillSeries Test(s) you will be interpreting. These norms offer assistance when evaluating each applicant's/employee's test scores.

Each table consists of two columns of numbers. The first column is the raw test score. The second column is the percentile rank for that particular score (or score range). The percentile rank is the percentage of test takers in the sample who obtained scores lower than the corresponding test score. For example, a test taker making a score of 14 on the Analyzing Skills section scored in the 88th percentile. This means that the applicant or employee scored higher than 88% of the test takers in the norm sample.



Table 1
Analyzing Skills

Test Score	Corresponding Percentile
19+	100
18	99
17	98
16	95
15	92
14	88
13	83
12	77
11	69
10	59
9	49
8	37
7	24
6	13
5	7
4	3
3	2
2 or less	1

Average Score	10
Standard Deviation	3.52
Number of Participants	5,072



Table 2
Assembly Skills

Test Score	Corresponding Percentile
10	100
9	97
8	90
7	83
6	71
5	60
4	45
3	33
2	19
1	9
0	2

Average Score 5
Standard Deviation 2.51
Number of Participants 517



Table 3
Attention to Detail Skills

Test Score	Corresponding Percentile
20	100
19	89
18	72
17	55
16	42
15	31
14	22
13	15
12	9
11	6
10	3
9	2
8 or less	1

Average Score	17
Standard Deviation	2.87
Number of Participants	4,814



Table 4
Filing Skills

Test Score	Corresponding Percentile
20	100
19	99
18	97
17	94
16	91
15	87
14	82
13	78
12	72
11	66
10	59
9	53
8	47
7	42
6	37
5	31
4	26
3	20
2	14
1	9
0	3

Average Score 9
Standard Deviation 5.31
Number of Participants 4,969



Table 5
Grammar Skills

Test Score	Corresponding Percentile
20	100
19	99
18	97
17	92
16	85
15	76
14	67
13	58
12	50
11	42
10	35
9	28
8	23
7	18
6	13
5	9
4	6
3	4
2	2
1	1

Average Score	12
Standard Deviation	4.34
Number of Participants	6,932



Table 6
Inspection Skills

Test Score	Corresponding Percentile
20	100
18-19	97
17	96
16	95
14-15	94
13	92
12	91
11	90
10	86
9	71
8	63
7	51
6	42
5	35
4	26
3	17
2	12
1	5
0 or less	1

Average Score 8
Standard Deviation 4.21
Number of Participants 519



Table 7
Logic & Reasoning Skills

Test Score	Corresponding Percentile
20	100
19	99
18	95
17	88
16	77
15	65
14	52
13	41
12	31
11	23
10	17
9	12
8	9
7	6
6	3
5	2
4 or less	1

Average Score	14
Standard Deviation	3.42
Number of Participants	6,771



Table 8
Math Skills

Test Score	Corresponding Percentile
20	100
19	98
18	97
17	95
16	92
15	86
14	81
13	72
12	61
11	48
10	36
9	27
8	18
7	11
6	6
5	4
4	2
3 or less	1

Average Score	12
Standard Deviation	3.48
Number of Participants	4,953



Table 9
Proofreading Skills

Test Score	Corresponding Percentile
18+	100
17	99
16	98
15	95
14	91
13	87
12	81
11	73
10	65
9	57
8	48
7	40
6	32
5	26
4	20
3	15
2	11
1	8
0	5
-1	3
-2 or less	1

Average Score 9
Standard Deviation 4.53
Number of Participants 4,885



Table 10
Reading Comprehension Skills

Test Score	Corresponding Percentile
10	100
9	91
8	77
7	57
6	41
5	29
4	19
3	10
2	5
1	2
0	1

Average Score 7
Standard Deviation 2.29
Number of Participants 507



Table 11
Spelling Skills

Test Score	Corresponding Percentile
25	100
24	98
23	95
22	88
21	74
20	59
19	52
18	39
17	31
16	23
15	18
14	12
13	7
12	6
9-11	5
8	4
7 or less	1

Average Score	19
Standard Deviation	3.79
Number of Participants	447



Table 12
Vocabulary Skills

Test Score	Corresponding Percentile
20	100
19	81
18	62
17	48
16	37
15	30
14	24
13	20
12	16
11	13
10	11
9	9
8	7
7	5
6	4
5	3
3-4	2
2 or less	1

Average Score	16
Standard Deviation	4.13
Number of Participants	6,473



You can use the information from Tables 1 to 12 as a guide for selecting the best job candidate; however, we strongly recommend that you collect and validate your own test data. The applicant/employee pool in your organization may differ from the study sample presented in this manual. Factors such as geographic location, business category and job responsibilities may have a significant effect on test scores.

One way to develop your own norms and benchmarks is to administer one or more of the SkillSeries Tests to your current employees. This will allow you to compare the scores of your top performers with those of your less productive employees. This information then can serve as a guide during your applicant evaluation process. In addition, if you can establish and document that, in general, high scorers on specific tests are also your better-performing employees, this can serve as an initial step in establishing the validity of the SkillSeries Tests within your organization.

If you do administer one or more SkillSeries Tests to your employees for establishing company-specific norms, make sure your employees understand that the results of your study will be used for norm development only and that their employment status will in no way be affected by their scores.

The EEOC and the Uniform Guidelines on Employee Selection Procedures recommend that job analyses be performed in conjunction with validation studies to determine the job-relatedness of each test and other selection tools used throughout the hiring process. It is the employer's responsibility to periodically monitor its employment screening process to ensure that it is fair and valid.



Validity

Effective applicant/employee evaluation procedures need to be valid. Validity can be defined as the extent to which the measure helps in predicting job performance. In other words, validity can be conceptualized as to whether there is a relationship between test scores and job performance. The research findings presented in this section provide evidence that the SkillSeries Tests are valid predictors of a wide range of on-the-job skills.

The validation design conducted here is known as concurrent validation. A professionally conducted validation study is acknowledged to be an acceptable means of test validation as described by the federal government's Uniform Guidelines on Employee Selection Procedures. Essentially, this approach requires that the test be administered to current employees and, concurrently, data on the performance of these employees be gathered. If the test is valid, one would expect a statistically significant correlation between individual test scores and job performance. In other words, those employees who score highly on the test would be those who also perform best on the job; those who do poorly on the test would be likely to receive poor performance evaluations.

Validity Studies

The SkillSeries Tests have been validated in a wide variety of organizations using employees from many different job classifications requiring many different skills. The job classifications have included clerical jobs (secretary, file clerk, accounting clerk, shipping and receiving clerks), support staff (assistants and coordinators), laborers (assembly and production workers), customer service and telemarketing representatives and supervisors. Table 13 (on the next page) presents the validity coefficients for each SkillSeries Test. The "Job Performance Dimensions" column lists the job dimensions that each test has been found to be predictive of. As a point of reference, the average validity coefficient for the standard job interview has been found to be 14.¹

¹ Hunter, J.E., & Hunter, R.F. (1984). Validity and Utility of Alternative Predictors of Job Performance. *Psychological Bulletin*, Vol. 96, No. 1, 72-96.



Table 13
Correlation Between the SkillSeries Test and Job Performance Dimensions

SkillSeries Test	Job Performance Dimension	Validity Coefficient	Significance Level	N
Analyzing Skills	Math Skills	.24	p<.02	101
	Overall Job Performance	.19	p<.05	112
Assembly Skills	Learning Ability	.39	p<.013	41
	Ability to Understand Instructions	.34	p<.030	41
	Math Skills	.34	p<.029	42
	Perceptual Accuracy	.54	p<.001	42
	Assembly Skills	.72	p<.001	42
	Work Quality	.34	p<.036	39
	Safety	.28	p<.081*	39
	Overall Job Performance	.46	p<.005	38
Attention to Detail Skills	Proofreading Skills	.30	p<.003	103
Filing Skills	Analyzing Skills	.25	p<.02	92
	Math Skills	.31	p<.003	100
	Filing Skills Overall job Performance	.27 .24	p<.007 p<.02	105 111
Grammar Skills	Grammar Skills	.30	p<.001	160
	Vocabulary Skills	.33	p<.001	160
	Cognitive Skills	.65	p<.001	176
	Overall Job Performance	.23	p<.004	160
Inspection Skills	Perceptual Accuracy	.51	p<.002	41
	Assembly Skills	.33	p<.038	41
Logic and Reasoning Skills	Problem-Solving Skills	.22	p<.035	90
	Math Skills	.23	p<.047	75
	Cognitive Skills	.71	p<.001	102
Math Skills	Math Skills	.22	p<.03	101
Proofreading Skills	Proofreading Skills	.27	p<.007	103
	Overall Job Performance	.18	p<.06*	110
Reading Comprehension Skills	Reading Skills	.21	p<.02	152
	Writing Skills	.23	p<.02	152
Spelling Skills	Cognitive Skills	.40	p<.001	102
Vocabulary Skills	Grammar Skills	.23	p<.004	159
	Vocabulary Skills	.18	p<.022	159
	Cognitive Skills	.63	p<.001	175

*Correlation approaches .05 level of statistical significance.
Note: N equals the number of participants in the analysis.



The research presented on the previous page strongly suggests that the SkillSeries Tests are valid predictors of a wide range of on-the-job skills. Employees/applicants who score highly on the tests are more likely to perform job tasks in a satisfactory or above satisfactory manner.

Incorporating one or more of these tests into your selection process for positions requiring specific skills will add objectivity to your employment decisions and will help you hire the best candidates for your organization.

Giving Feedback and Discussing Test Scores

Providing feedback to test takers is a delicate process that should be taken seriously. Test takers are entitled to accurate and honest feedback. Note that communicating test scores to test takers may not be a good idea because they may lack sufficient knowledge about statistics and psychological measurements to interpret the results. Your organization should develop a procedure so test takers can be told what the next step in the hiring process is, regardless of their score on the SkillSeries Test(s) or any other test. You should emphasize that the test results are only one of the criteria used to make selection or promotion decisions. Remind the applicant that there are many people applying for the same position and that each applicant will be considered based on the extent to which his/her entire set of qualifications and experience matches the position's requirements. The test score is only one such measurement.

Blaming a test for the rejection of an applicant should not be done. Hiring decisions never should be based solely on any single test score. It is the interviewer's responsibility to review all of the information gathered from the various components of the screening process, such as the employment application, the interview, reference checks and other tests, to formulate a decision about the applicant's match to the position. Feeling that one is the victim of a single test score may provoke unnecessary resentment on the applicant's part.

The employer assumes full responsibility for the proper use of HR•Assessments as described in this manual. This includes establishing each scale's job relatedness to the job in question and periodically examining selection rates for minorities and non-minorities to ensure the selection process continues to be fair and free from bias. EDI and the test developer do not accept liability for any unlawful use of this product.

While HR•Assessments were designed to help predict various aspects of human behavior, score results are presented in terms of probabilities. False Positives and False Negatives are expected. EDI and the test developer are not liable for test taker, applicant or employee behaviors.

If you have any questions regarding the SkillSeries Tests or any other HR•Assessments® product, call toll-free 800-264-0074.