Applicant Risk Profiler

A.R.P.

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Administrator's Manual

HR•Assessments®

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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.

Assessment 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 assessment has been researched and developed by our staff of assessment 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 utilized 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 each other 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 focus 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 which 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 reaction to certain questions, the employment assessments seek to gain information on the job candidate through a series of questions designed to measure certain job-related attributes.

Today, the use of employment assessments continues to increase. Many of the country's largest corporations use these types of 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. While there is evidence of poorer test 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 as 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 constantly 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 entitled *Using Job Analysis to Justify Use of Test and Its 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 United States 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 establishes 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 there exists evidence of adverse impact. It is important to note also that compliance with the Guidelines does not remove the affirmative action obligations for test 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 of employment stage, except in a very narrowly defined situation where the applicant has voluntarily disclosed a medical condition requiring accommodation. The ADA protects disabilities, not a characteristic which 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 name 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 which would even tend to elicit such information, should appear on an assessment product. Each HR•Assessments® product has been carefully reviewed under this standard, in order to avoid any conflict with the 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 specifically designed 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 links 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 test taker's scores, as well as other important data that may be used to compute your own assessment 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 this is happening. If the use of a particular 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 if the assessment is the cause of the adverse impact and whether or not the assessment is focusing on a bona fide occupational qualification for the job. In some instances, assessments that in some contexts may be considered discriminatory may be lawful to use in others, as long as the assessment is focusing on a bona fide occupational qualification.

Scoring

Cut-offs 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 the developer and is for demonstrative purposes only. Assessment results should always 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 that you may develop your own company-specific norms for assessment performance. These norms can then be used as benchmarks during your selection process.

The Importance of Assessing Counterproductive Workplace Behaviors

An organization is only as good as its employees. The best product or service means little if you have selected an untrustworthy and dangerous employee. Experts estimate that between 10% and 30% of all job applicants lie or distort the truth on their resumes. These lies have led to workplace violence, on-the-job substance abuse and theft – a total of $120 billion in financial losses each year.

Identifying a Potential Risk

The HR•Assessments® Applicant Risk Profiler (A.R.P.) was designed to assist companies in determining which applicants are a potential risk or threat to their supervisors, coworkers and/or themselves. Unfortunately, not everyone can be trusted. The A.R.P. gives you the ability to objectively, and in a nonthreatening manner, obtain an individual's opinion on and tendencies toward the following four counterproductive workplace behaviors:

1. **Integrity –** Will the applicant be likely to steal from his/her employer or do something behind a coworker's or supervisor's back without their approval?

2. **Illegal Drug Use –** Will the applicant be likely to work under the influence of illegal drugs or use illegal drugs in the workplace?

3. **Workplace Policy Compliance –** Will the applicant be likely to disobey company policies and procedures?

4. **Workplace Aggression –** Will the applicant be likely to engage in aggressive workplace behaviors?

5. **Attendance** – Will the applicant be dependable, stable and take responsibility for his/her actions?

See the *Interpretation and Use of Scores* section of this manual for a more detailed definition of each scale.

The A.R.P. is also a powerful interviewing tool. You can use applicant responses to specific assessment questions to generate follow-up interview questions that further assess their behavioral tendencies.

Your company's success depends largely on the soundness of your hiring decisions. The risk of hiring a destructive applicant is too great to ignore. Incorporating the A.R.P. into your selection process should significantly increase your hiring accuracy and provide an effective means of maintaining workplace safety and ethics.

Description of the A.R.P.

The questions that make up the A.R.P. were developed from an extensive review of the psychological literature focusing on what variables and personality characteristics lead to theft in the workplace, illegal drug use, rules and policy noncompliance, aggressive tendencies and attendance issues.

Each question was written specifically with the employment environment in mind, unlike most other "clinically based" personality assessment instruments. Assessment instruments designed specifically for the employment setting are more likely to be better predictors of on-the-job behaviors than clinically based assessments. Assessment instruments developed for the workplace are also viewed by applicants as more job-relevant (face valid) than those developed for clinical assessment and, therefore, are less likely to be questioned in terms of appropriateness for the job.

The research presented in the *Validity and Reliability* section of this manual will demonstrate how an individual's scores on four of the A.R.P. scales are predictive of nonproductive and unsafe workplace behaviors. The 6th scale of the A.R.P. is the Deception Scale, which helps to determine the degree to which the applicant is responding to the profile items in a socially desirable manner. The A.R.P. consists of 80 questions with a Strongly Agree/Strongly Disagree answer format. Although the assessment is untimed, most applicants complete it in less than 30 minutes.

Below are the assessment instructions and a sample question.

DIRECTIONS

The following questionnaire consists of statements that describe work-related behaviors and attitudes. Each statement is followed by a rating scale that defines the degree to which you agree or disagree with the statement. The scale ratings are defined as follows:

> SA = **Strongly Agree**
> A = **Agree**
> N = **Neutral**
> D = **Disagree**
> SD = **Strongly Disagree**

A sample statement similar to those found in the questionnaire is provided below.

All employees bend the rules now and then.   SA   A   N   D   SD

As you read each statement, please think of how it applies to you during your day-to-day working situations. Please CIRCLE the scale rating that best defines the degree to which you agree or disagree with each statement.

Do you have any questions?

This questionnaire contains 80 statements similar to the one presented above. There is no set time limit for completing this questionnaire, so please take your time and answer each question carefully and honestly. You should use a ballpoint pen when completing the questionnaire. If you make a mistake, DO NOT ERASE your mark. Draw an X over your first answer, then CIRCLE the desired response. Please make sure you answer every question.

The examiner will not answer any questions once you have started.

Using Job Analysis to Justify Use of Test and Its Sections (Legal Implications)

From a legal standpoint, if a test is to be used for selection or promotion purposes, it is important that users of the test take the necessary steps to establish a clear linkage 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 first be identified. Then, the abilities underlying each task can be determined. This process should reveal the traits that are relevant to the job in question and should be carefully documented to justify the appropriateness of the A.R.P. in the employee selection process. The following are examples of job abilities similar to those measured by the A.R.P.

Task	A.R.P. Scale
Operates a cash register, performing all transactions required of selling merchandise, exchanging merchandise and offering refunds.	Integrity
Operates a forklift and various other warehouse machinery as necessary.	Illegal Drug Use
Performs all duties as assigned, following company policies and procedures.	Workplace Policy Compliance
Interacts with coworkers as part of everyday activities coordinating departmental projects and functions.	Workplace Aggression
Can be counted on to show up to work consistently and on time and to meet deadlines as assigned.	Attendance

As a general guideline for compliance with federal discrimination and disability laws, test users should not subject test takers to any adverse employment decision 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 job 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 this type of 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 these instructions before administering the A.R.P.

1. Before administering, you should be familiar with the assessment and administration instructions. Be prepared to answer any questions that may be raised.

2. The assessment should be administered in a quiet room, free from distractions and interruptions.

3. Provide each applicant with a ballpoint pen to ensure clear markings on the answer sheets.

4. Distribute the assessment and have the applicant complete the information on the front cover (i.e., name, Social Security number and date).

5. Introduce the assessment to the applicant. Say, "This questionnaire is designed to assess your opinion of different types of work-related behaviors and attitudes. There are no right or wrong answers. Responses will vary depending on each individual's personal beliefs."

6. Have the applicant read the directions. You should say, "Read the directions on the front cover. Remember there are no right or wrong answers, so please be as honest as possible. Your unique style of thinking about or handling various types of work-related situations may be exactly what the job requires. Remember, your first response is often your most candid and honest response."

7. After the applicant has read the assessment directions, ask, "Are there any questions?" If there are no questions, state, "There is no time limit, so please take your time and make sure you answer every question. Remember to think about the questions as they relate to your day-to-day working situations and not to situations outside of the working environment. You may begin."

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 limitations 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.

8. Once the applicant completes the assessment, ask him/her to make sure he/she has answered every question. When the assessment is turned in, say, "Thank you. We appreciate your taking the time to complete this questionnaire."

Scoring Instructions for Paper Tests

1. To score the A.R.P., tear off the perforated tab on the right side. Carefully separate the cover from the answer sheet.

2. Notice that the key is separated into six parts by horizontal lines. Five parts correspond to the counterproductive attitudes measured by the A.R.P. One part corresponds to a built-in Deception Scale.

Items 1-2 and 38-40 measure likelihood of Deception
Items 3-9 and 41-48 measure Integrity
Items 10-16 and 49-56 measure Illegal Drug Use
Items 17-23 and 57-64 measure Workplace Policy Compliance
Items 24-30 and 65-72 measure Workplace Aggression
Items 31-37 and 73-80 measure Attendance

The applicant's answers should appear as circles on the carbonless key. For the counterproductive Scales (i.e., Integrity, Illegal Drug Use, Workplace Policy Compliance, Workplace Aggression and Attendance sections), there are no "correct" or "incorrect" answers. The score for each of these Scales is determined by adding up all the point values for the items within that Scale.

For example, to determine an individual's score on the Integrity Scale, add the circled numbers to items 3-9 and 41-48. Write this number in the box along the right side of the key titled Integrity Score. Use the same process to obtain the scores for each of the remaining counterproductive Scales. If an applicant circles two answers for the same question, count the answer with the lower value. If an answer choice is marked with an X, this indicates that the applicant made a mistake, and it should not be counted. If an answer choice is not circled, assign a value of 1 for that question.

For the five Deception Scale items, count the number of rectangles that have circles inside of them. Write this number in the box titled Deception Score on the right side of the answer sheet. This is the Deception Scale Score. See the section of this manual titled *Deception Scale Score* for instructions on how to interpret this score.

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 **www.mytests.hrdirect.com** or **http://www.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 print out 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 Scores

The A.R.P. Scale scores should be used in conjunction with other applicant information (e.g., the applicant's work history, references, other skills or interview evaluations) to help you hire the best individual for your organization.

A high Scale score indicates that there is a strong probability that the applicant will engage in counterproductive work behaviors. Therefore, the higher the score, the higher the risk of hiring a potential problem employee.

The definition of each Scale is presented on the following pages:

Integrity Scale

The Integrity Scale measures the likelihood that an individual will steal from his/her employer and/or will do something behind a coworker's or supervisor's back which would be disapproved.

Based on the Validity Study samples presented in this manual, a score range of 15-30 indicated that 13% of the participants engaged in stealing or deceptive behaviors at work at least once in the past year; a score range of 31-36 indicated 53%; and a score range of 37 or more indicated 85%.

Employee Integrity by Integrity Scale Scores

% of Employees Engaging In Stealing and/or Deceptive Behavior

Integrity Scale Score Ranges
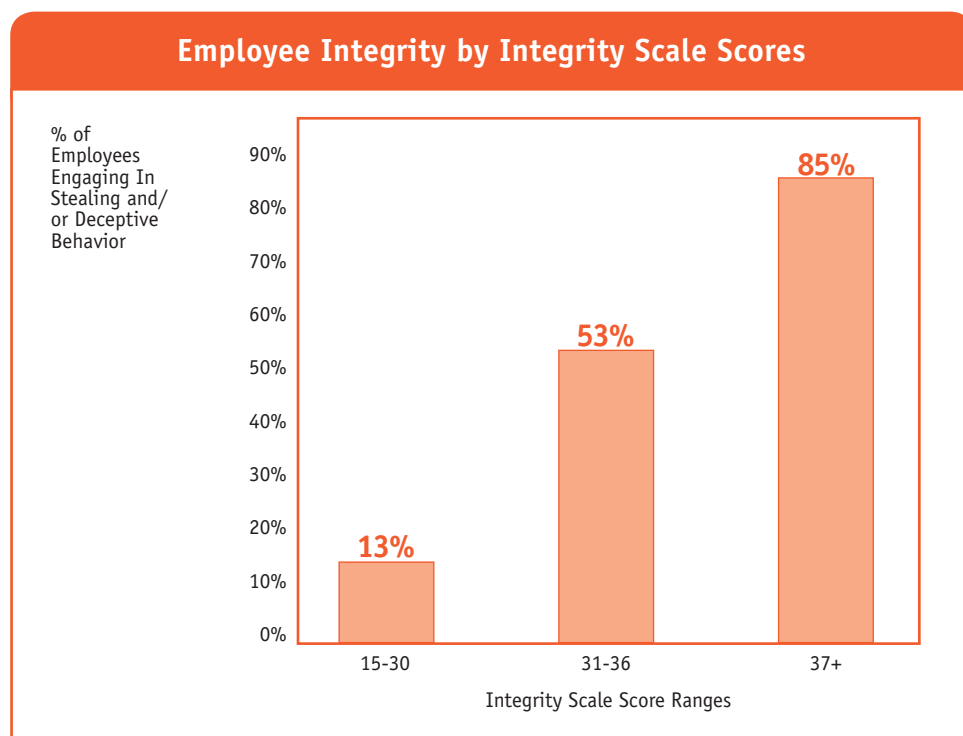
Illegal Drug Use Scale

The Illegal Drug Use Scale measures the likelihood that an individual will show up to work intoxicated from the use of illegal drugs (including marijuana, cocaine, crack, etc.) and/or consume illegal drugs during work hours and/or work breaks.

Based on the Validity Study samples presented in this manual, a score range of 15-27 indicated that 0% of the participants engaged in illegal drug use activities at work within the past six months; a score range of 28-35 indicated 4%; and a score range of 36 or more indicated 9%.

Illegal Drug Use by Illegal Drug Use Scale Scores

% of Employees Engaging In Illegal Drug Use at Work.

Score Range	%
15-27	0%
28-35	4%
36+	9%

Illegal Drug Use Scale Score Ranges
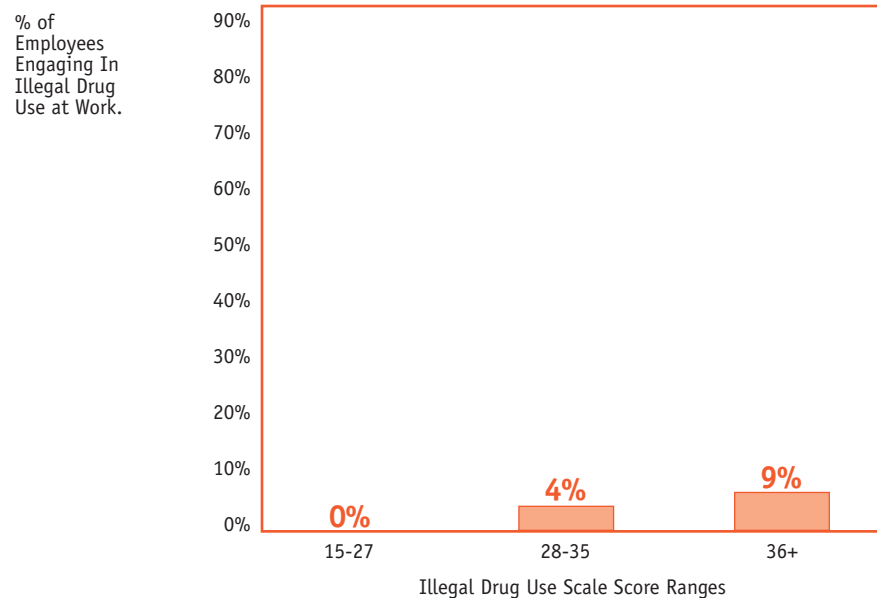
Workplace Policy Compliance Scale

The Workplace Policy Compliance Scale measures the likelihood that an individual will not follow work-related policies and procedures, will have unexcused absences, will call in sick when he/she is not, will work on personal matters at work and/or will go against a supervisor's wishes.

Based on the Validity Study samples presented in this manual, a score range of 15-30 indicated that 8% of the participants did not comply with workplace policies and procedures within the past year; a score range of 31-36 indicated 51%; and a score range of 37 or more indicated 67%.

Policy Compliance by Workplace Policy Compliance Scale Scores

% of Employees not Complying with Company Policies and Procedures

Workplace Policy Compliance Scale Score Ranges		
15-30	31-36	37+
8%	51%	67%
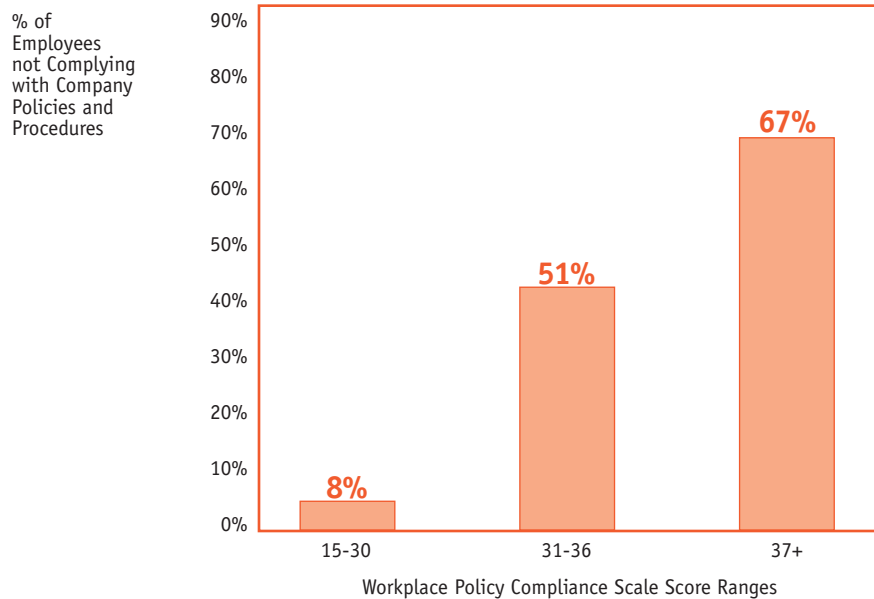
Workplace Aggression Scale

The Workplace Aggression Scale measures the likelihood that an individual will engage in aggressive workplace behaviors (e.g., have physical fights with coworkers or customers, threaten a coworker and/or supervisor, intentionally damage company property or merchandise and/or bring a weapon to work without the consent of the employer).

Based on the Validity Study samples presented in this manual, a score range of 15-27 indicated 3% of the participants engaged in at least one aggressive workplace behavior; a score range of 28-34 indicated 13%; and a score range of 35 or more indicated 40%.

Aggression by Workplace Aggression Scale Scores

% of Employees Involved In Aggressive Workplace Behaviors

Workplace Aggression Scale Score Ranges	Percentage
15-27	3%
28-34	13%
35+	40%
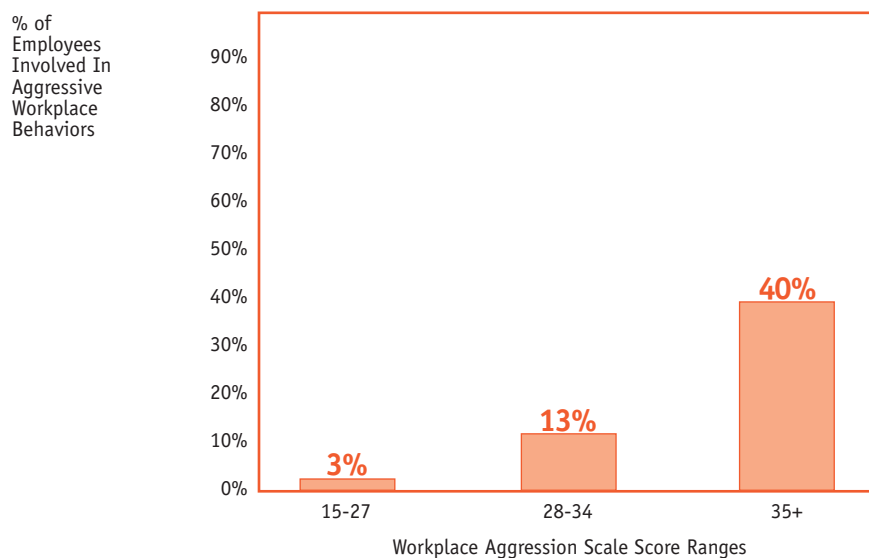
Attendance Scale

The Attendance Scale measures the degree to which the individual is likely to be dependable, stable, takes responsibility for his/her actions and as a result, is not likely to have attendance problems.

Based on the Validity Study samples presented in this manual, a score range of 15-32 indicated an average supervisory rating of 4.5 on a 7.0 point rating scale; a score range of 33-38 indicated an average rating of 5.0; and a score range of 39+ or more indicated an average rating of 5.8

Reliability Ratings by Attendance Scale Scores

Supervisory Performance Ratings of Reliable Workplace Behaviors

1.0 indicates excellent reliability

7.0 indicates poor reliability

4.5 — 15-32

5.0 — 33-38

5.8 — 39+

Attendance Scale Score Ranges
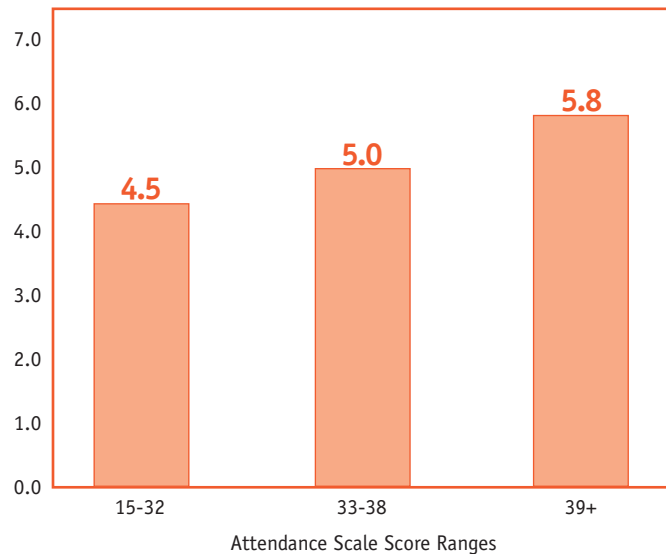
The Table below summarizes A.R.P. score ranges and their associated risk levels based on the data collected for the validity and reliability research presented in this manual.

Table 1
A.R.P. Scale Risk Level

	Integrity Scale	Illegal Drug Use Scale	Workplace Policy Compliance Scale	Workplace Aggression Scale	Attendance Scale	Total
Low Risk Score Range	15 - 30	15 - 27	15 - 30	15 - 27	15-32	75-146
Moderate Risk Score Range	31 - 36	28 - 35	31-36	28-34	33-38	151-179
High Risk Score Range	37+	36+	37+	35+	39+	184-375

Deception Scale Score

Two issues that arise regarding measuring personality tendencies in applied settings such as those in the A.R.P. are (1) whether the test taker has the ability to improve their score, or "fake" results, and (2) whether trying to improve the outcome is an undesirable quality.

When job candidates take a personality inventory, a common critique is that they have the opportunity to answer in ways intended to enhance their score. In studies where test takers are instructed to try to enhance their scores, there is evidence that some people can indeed alter personality measures. Despite this fact, empirical evidence also shows that the base rate of faking during the actual employment screening process is rare and infrequent (Dunnette, McCartney, Carlson & Kirchner, 1962)[1], (Hough, Barge, Houston, McGue, & Kamp, 1985)[2].

The fact that there are rare cases where some people can enhance personality scores raises the second issue; the question of whether or not self-enhancement tendencies are merely reflecting a function of most normal interaction. In a social context, people habitually participate in casting the best possible light on themselves, and, in fact, are judged positively when successful. Consequently, it may be viewed that the ability to improve a personality score is an index of social competence.

Although test faking is uncommon and even when it does take place, it changes criterion-related validities only slightly (Hough, Easton, Dunnette, Kamp, & McCloy, 1990)[3], the A.R.P. takes extra precaution against attempted test faking.

1 Dunnette, M.D., McCartney, J., Carlson, H.C., & Kirchner, W.K. (1962). A study of faking behavior on a forced-choice, self-choice, and self-description checklist. *Personnel Psychology*, 15, 13-24.

2 Hough, L.M., Eaton, N.K., Dunnette, M.D., Kamp, J.D., & McCloy, R.A. (1990). Criterion-related validities of personality constructs and the effect of response distortion on those validities. *Journal of Applied Psychology*, 75, 581–595.

3 Hough, L.M., Barge ,B.N., Houston, J.S., McGue, M.K., & Kamp, J.D. (1985, August). Problems, issues, and results in the development of temperament, biographical, and interest measures. Paper presented at the 93rd Annual Meeting of the American Psychological Association, Los Angeles.

As seen in the *Validity and Reliability* section of this manual, the A.R.P. is demonstrably valid for personnel selection purposes regardless of any faking that may have occurred. Further, the A.R.P. includes a Deception Scale that detects test takers who attempt to present themselves in an overly favorable light, and alerts the employer to the apparent response distortion. This Deception Scale is designed to alert you about applicants who gave answers that varied from the norm. This is not a polygraph or lie detector test, and its results should not be used as such.

The Deception Scale score can range from "0" to "5." The higher the score the likelier the applicant was trying to present him/herself in a favorable light. This suggests that some of their responses to the inventory may reflect how they want you to perceive them and not necessarily how they truly feel. The following is a general guideline that you can use when interpreting the Deception Scale. However, as you test more applicants and follow-up with more targeted interview questions that offer more insight into the applicants' responses, you may develop your own interpretation guidelines.

A score range of 0-1 suggests that there is a Low Likelihood that the applicant was attempting to "fake" his/her responses. The applicant's responses are likely to be an accurate representation of his/her attitudes and behaviors.

A score range of 2-3 suggests that there is a Moderate Likelihood that the applicant attempted to "fake" some of his/her responses. Some of the applicant's responses may not accurately represent his/her true attitudes. However, as mentioned above, it is normal for some applicants to attempt to present themselves in a favorable light during the interview/testing process. This score range is not likely to invalidate the test results.

A score range of 4-5 suggests that there is a High Likelihood that the applicant attempted to "fake" some of his/her responses. Some of the applicant's responses may not accurately represent his/her true attitudes. Follow-up interview questions asking the applicant to give job or work-related examples of some of his/her overly positive responses are recommended.

Norms

Norms also provide a point of reference regarding the relative performance of each applicant/employee when interpreting assessment scores. Norms are the average scores or distribution of scores obtained from the study sample. These score "patterns" can be compared to your own applicants'/employees' assessment scores to better define performance on the A.R.P.

Tables 2 to 6 on the following pages present the distribution of scores for each of the counterproductive Scales and the Scales' associated percentile rank for over 3,000 applicants who have taken the A.R.P. Table 7 presents the same information for all scale scores combined. The percentile rank is the percentage of applicants in the sample who obtained scores lower than the corresponding scale score. For example, when reviewing Table 2, it can be said that an applicant obtaining a score of 36 scored in the 85th percentile. This means the applicant scored higher than 85% of the applicants in the norm sample.

Table 2
Integrity Scale

Scale Score	Corresponding Percentile
49+	100
45-48	99
44	98
42-43	97
41	96
40	95
39	93
38	91
37	88
36	85
35	82
34	78
33	73
32	68
31	63
30	57
29	51
28	45
27	39
26	34
25	30
24	25
23	22
22	18
21	14
20	12
19	10
18	7
17	5
16	3
15	2
14 or less	1

Average Score   29
Standard Deviation   7.01
Number of Participants   3,577

Table 3

Illegal Drug Use Scale

Scale Score	Corresponding Percentile
39+	99
36-38	98
35	97
34	96
33	95
32	94
31	92
30	89
29	86
28	83
27	80
26	77
25	74
24	70
23	67
22	63
21	58
20	53
19	47
18	39
17	33
16	26
15	17
14 or less	1

Average Score   22
Standard Deviation   6.39
Number of Participants   3,587

Table 4

Workplace Policy Compliance Scale

Scale Score	Corresponding Percentile
49+	99
47-48	98
45-46	97
44	96
43	95
42	94
41	92
40	90
39	88
38	85
37	82
36	78
35	74
34	68
33	63
32	58
31	51
30	45
29	40
28	35
27	31
26	27
25	23
24	20
23	17
22	14
21	12
20	10
19	7
18	5
17	3
16	2
15 or less	1

Average Score	31
Standard Deviation	7.58
Number of Participants	3,568

Table 5

Workplace Aggression Scale

Scale Score	Corresponding Percentile
39+	99
37-38	98
35-36	97
34	95
33	94
32	93
31	91
30	89
29	85
28	81
27	78
26	75
25	71
24	67
23	63
22	57
21	52
20	46
19	38
18	29
17	21
16	14
15	8
14 or less	1

Average Score   23
Standard Deviation   6.17
Number of Participants   3,558

Table 6

Attendance Scale

Scale Score	Corresponding Percentile
49+	99
47-48	98
45-46	97
44	96
43	95
42	94
41	91
40	90
39	88
38	85
37	82
36	78
35	74
34	68
33	63
32	58
31	52
30	45
29	41
28	35
27	31
26	27
25	23
24	20
23	17
22	15
21	12
20	10
19	7
18	6
17	3
16	2
15 or less	1

Average Score   31
Standard Deviation   7.60
Number of Participants   3,558

Table 7

Applicant Risk Profiler Scale

Test Score	Corresponding Percentile
205+	99
198-204	98
193-197	97
187-192	96
185-186	95
181-184	94
179-180	93
176-178	92
174-175	91
172-173	90
170-171	89
169	88
167-168	87
166	86
165	85
164	84
163	83
161-162	82
160	81
159	80
158	79
157	77
156	76
155	75
154	74
153	73
152	72
151	71
150	70
149	68
148	67
147	66
146	65
145	64
144	63
143	61
142	60
141	59
140	57
139	56
138	55
137	53
136	52
135	51

Table 7

Applicant Risk Profiler Scale

Test Score	Corresponding Percentile
134	50
133	49
132	48
131	46
130	45
129	43
128	42
127	41
126	40
125	39
124	38
123	36
122	35
121	34
120	32
119	31
118	30
117	29
116	28
115	27
114	26
113	25
112	23
110-111	22
109	21
108	20
107	19
106	18
104-105	17
103	16
101-102	15
100	14
99	13
98	12
96-97	11
95	10
94	9
92-93	8
90-91	7
88-89	6
87	5
84-86	4
82-83	3
79-81	2

Table 7

Applicant Risk Profiler Scale

Test Score	Corresponding Percentile
78 or less	1

Average Score	136
Standard Deviation	30.31
Number of Participants	3,362

Table 8

Deception Score Scale

Test Score	Corresponding Percentile
5	100
4	77
3	52
2	31
1	16
0	4

Average Score	3
Standard Deviation	1.46
Number of Participants	3,672

Note: The higher the score on the Deception Scale, the likelier it is that the applicant/employee may be trying to "fake" the scale.

Developing Company-Specific Norms

You can use the information in Tables 1 to 8 as a guide in selecting the best job candidate; however, we strongly recommend that you collect and validate your own assessment data. The applicant/employee pool in your organization may differ from the study sample presented in this manual. Factors such as geographic location, business type and job responsibilities may have a significant effect on assessment scores.

One way to develop your own norms and benchmarks is to administer the A.R.P. to your current employees. This will allow you to compare the scores of your top performers with those of your less productive employees. The information can then serve as a guide during your applicant evaluation process.

In addition, if you can establish and document that, in general, high scorers on specific Scales are also your problematic employees, this can serve as an initial step in establishing the validity of the A.R.P. within your organization.

If you do administer the A.R.P. to your employees for the purpose of 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 A.R.P. 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 assessment 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.

Interviewing with the A.R.P.

In addition to providing an objective measure of an applicant's likelihood to engage in counterproductive work behaviors, the A.R.P. can also serve as a useful tool during the interviewing process. Responses to the assessment items can be addressed during the interview and the applicant can be given the opportunity to explain his/her answer. This approach may reveal some interesting insights into the applicant's unique style or tendencies.

Appropriate Responses

Before you interview the job applicant, carefully review his/her answers to the A.R.P. questions. Select several questions that were answered appropriately relative to the requirements of the job. Follow up during the interview with reinforcing/positive questions to "break the ice" and establish rapport with the applicant.

Below is an example of a follow-up question to an appropriate response.

> "You strongly agreed with the statement that said, 'In general, I believe that the only way to get ahead is to play fair' (Question #4). I agree with your response. Can you tell me specifically why you feel this way?"

Asking follow-up questions to positive responses helps ease some of the tension inherent in the interviewing process. Positive feedback encourages the applicant to open up and share more potentially critical information.

Inappropriate Responses

Questions answered inappropriately relative to the requirements of the job should also be analyzed. Inappropriate responses should be followed up with questions to clarify the reasons for the response. Clarification is important in helping to understand the applicant's thoughts and potential behaviors as they pertain to the "negative" answer.

Below is an example of a follow-up question to an inappropriate response.

> "You agreed with the statement, 'It takes great effort at times to stay within the rules' (Question #23). Can you elaborate on this? What specifically do you mean? Can you give me some examples?"

Follow-up questions to inappropriate responses can be used to better understand the opinions or thoughts of the applicant that may be contrary to the ideal employee. This information is extremely valuable in determining an individual's fit into the organization.

Discussing the Results of the A.R.P.

Your company should develop a procedure so that the applicant can be told what the next step in the hiring process is, regardless of his/her score on the A.R.P. or any other assessment tool. Emphasize that the A.R.P. is only one of the criteria used to determine if the applicant is a good match for the position. Remind the applicant that there are many people applying for the same position and that each applicant will be considered based on how all of his/her qualifications and experience match the position's requirements.

Some interviewers may be tempted to look for a quick or easy reason to tell the applicant why he/she was not selected. "Blaming" an assessment may seem like a plausible reason, but it is no comfort to the rejected applicant and should not occur. The fact is, the reason to hire or not to hire should never be based solely on any single assessment score. It is the interviewer's responsibility to review all the information gathered from the various tools used during the hiring process–such as the job application, the interview, reference checks and other tests – to form the decision on the applicant's appropriateness for the position.

The issue is, and should always be, whether there is an appropriate job fit between job and applicant. Using the A.R.P. is only a part of the information you need to make a decision. The other important part is knowing what else is required and desired in the employee filling the position, and effectively using all the sources available to you to make the best decision. This will ensure an effective selection process that offers a more comprehensive view of the applicant and results in hiring the best employee for your organization.

The employer assumes full responsibility for the proper use of the A.R.P. as detailed in this manual. This includes establishing the job-relatedness of the assessment to the position in question. If you have any questions about the proper use of employment assessments, contact an employment testing specialist.

Validity and Reliability

Effective applicant evaluation procedures need to be valid and reliable. Validity can be defined as the extent to which the instrument measures what it is supposed to measure. In other words, validity can be conceptualized as to whether or not there is a relationship between assessment scores and job performance. Reliability refers to how consistent an assessment instrument is at measuring what it is supposed to measure.

The research studies described next have been conducted to demonstrate the validity and reliability of the A.R.P. Scales.

The primary validation design discussed here is known as concurrent validation. A professionally conducted, concurrent validation study is acknowledged to be an appropriate means of test validation as described by the federal government's Uniform Guidelines on Employee Selection Procedures. Essentially, this approach requires that the assessment be administered to current employees and, concurrently, data on the performance of these employees be gathered. If the assessment is valid, one would expect a statistically significant correlation between individual assessment scores and performance. In other words, those employees scoring high on the assessment would be those who are at a higher risk of engaging in negative workplace behaviors; those who score low on the assessment would be at a lower risk.

Validity Study #1

Four of the A.R.P. Scales (Integrity, Illegal Drug Use, Workplace Policy Compliance and Workplace Aggression) were administered to approximately 100 individuals employed currently or within the past year (the exact number of administrations varied slightly by Scale). The jobs held ranged from entry-level through management. These individuals were enrolled in university-level courses and completed the assessment in return for extra-credit points. In conjunction with the assessment, participants answered questions about their past/present workplace behavior relative to integrity, illegal drug use, workplace policy compliance and workplace aggression. The assessment administrations were totally anonymous to increase the accuracy and candidness of the self-report questions. The participants' professors did not have access to the completed assessments or the self-report measures. The self-report measures collected for each Scale are presented below.

Integrity

In the past year, how many times
have you stolen from your employer?   0   1   2   3   4   5 + (Specify) _____

In the past year, what was the
approximate dollar value of
merchandise or money you stole from
your employer? $_____

In the past year, how many times did
you do something behind a supervisor's
back that you knew he/she would
disapprove of?   0   1   2   3   4   5 + (Specify) _____

In the past year, how many times did
you do something behind a coworker's
back that you knew he/she would
disapprove of?   0   1   2   3   4   5 + (Specify) _____

Overall Integrity Rating: An overall integrity rating was obtained by adding the responses to the self-report measures above. The dollar value response was converted to the following 5-point scale : \$1-\$10 = 1, \$11-\$25 = 2, \$26-\$99 = 3, \$100-\$499 = 4 and \$500+ = 5.

Illegal Drug Use

*In the past six months, how
many times did you show up to work
intoxicated from the use of
illegal drugs (including
marijuana, cocaine, crack, etc.)?   0   1   2   3   4   5 + (Specify) _____

*In the past six months, how many
times did you consume illegal
drugs (including marijuana, cocaine,
crack, etc.) during work hours
and/or work breaks?   0   1   2   3   4   5 + (Specify) _____

In the past year, how many times
have you gone against your
supervisor's wishes?   0   1   2   3   4   5 + (Specify) _____

In the past year, how many work-
related policies have you broken?   0   1   2   3   4   5 + (Specify) _____

Overall Illegal Drug Use Rating: An overall illegal drug use rating was obtained by adding
the responses to the self-report measures above identified with an asterisk (*).

Workplace Policy Compliance

*In the past year, how many times
have you been reprimanded for not
following work-related policies
and procedures?   0   1   2   3   4   5 + (Specify) _____

*In the past year, how many times
have you had unexcused absences
from work?   0   1   2   3   4   5 + (Specify) _____

*In the past year, how many times
have you called in sick to work
when you really were not?   0   1   2   3   4   5 + (Specify) _____

In the past year, how many
times have you worked on
personal matters at work behind
your supervisor's back?   0   1   2   3   4   5 + (Specify) _____

*In the past year, how many times
have you gone against your
supervisor's wishes?   0   1   2   3   4   5 + (Specify) _____

*In the past year, how many work-
related policies have you broken?   0   1   2   3   4   5 + (Specify) _____

Overall Workplace Policy Compliance Rating: An overall workplace compliance rating
was obtained by adding the responses to the self-report measures above identified with
an asterisk (*).

Workplace Aggression

In the past year, how many heated arguments have you had with coworkers and/or supervisors?	0	1	2	3	4	5 + (Specify)_____
*In the past year, how many physical fights have you had with coworkers and/or supervisors?	0	1	2	3	4	5 + (Specify)_____
In the past year, how many heated arguments have you had with customers?	0	1	2	3	4	5 + (Specify)_____
*In the past year, how many physical fights have you had with customers?	0	1	2	3	4	5 + (Specify)_____
In the past year, how many times have you seriously thought about hurting a coworker and/or supervisor?	0	1	2	3	4	5 + (Specify)_____
*In the past year, how many times have you threatened to hurt a coworker and/or supervisor?	0	1	2	3	4	5 + (Specify)_____
*In the past year, how many times have you intentionally damaged company property or merchandise?	0	1	2	3	4	5 + (Specify)_____
*In the past year, how many times have you brought a weapon (e.g., gun, knife) to work without the consent of your employer?	0	1	2	3	4	5 + (Specify)_____

Overall Workplace Aggression Rating: An overall workplace aggression rating was obtained by adding the responses to the self-report measures above identified with an asterisk (*).

Correlations between the four A.R.P. Scale scores and their corresponding self-report behavioral measures were performed to determine the degree to which the A.R.P. Scales predicted past negative workplace activities. The results of these analyses are presented below for each A.R.P. Scale.

Table 9
Integrity Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many times have you stolen from your employer?	.42	p < .001	100
In the past year, what was the approximate dollar value of merchandise or money you stole from your employer?	.28	p < .005	99
In the past year, how many times did you do something behind a supervisor's back that you know he/she would disapprove of?	.48	p < .001	97
In the past year, how many times did you do something behind a coworker's back that you know he/she would disapprove of?	.41	p < .001	99
Overall Integrity Rating	.51	p < .001	95

Note: N equals the number of participants in the analysis.

The results presented here suggest that the A.R.P. Integrity Scale is a strong predictor of each of the criteria collected. That is, the higher the individual's score is on this Scale, the greater the likelihood that the individual will engage in untrustworthy workplace behaviors.

Table 10
Illegal Drug Use

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past six months, how many times did you show up to work intoxicated from the use of illegal drugs (including marijuana, cocaine, crack, etc.)?	.35	p < .001	80
In the past six months, how many times did you consume illegal drugs (including marijuana, cocaine, crack, etc.) during work hours and/or work breaks?	.49	p < .001	80
In the past year, how many times have you gone against your supervisor's wishes?	.19	p< .10*	79
In the past year, how many work-related policies have you broken?	.36	p< .001	78
Overall Illegal Drug Use Rating	.59	p < .001	80

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

The results presented here suggest that the A.R.P. Illegal Drug Use Scale Score is a valid predictor of illegal drug use activities in the workplace as well as non-compliance behaviors. That is, the higher an individual scores on this Scale, the greater the likelihood that the individual will be involved with illegal drugs in the workplace and not comply with established policies and procedures.

Table 11
Workplace Policy Compliance Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many times have you been reprimanded for not following work-related policies and procedures?	.30	p < .003	96
In the past year, how many times have you had unexcused absences from work?	.25	p < .012	97
In the past year, how many times have you called in sick to work when you really were not?	.26	p < .011	97
In the past year, how many times have you worked on personal matters at work behind your supervisor's back?	.33	p < .002	94
In the past year, how many times have you gone against your supervisor's wishes?	.33	p < .001	94
In the past year, how many work-related policies have you broken?	.41	p < .001	94
Overall Workplace Policy Compliance Rating	.45	p < .001	92

Note: N equals the number of participants in the analysis.

The results presented here suggest that the A.R.P. Workplace Policy Compliance Scale is a strong predictor of each of the criteria collected. That is, the higher an individual scores on this Scale, the greater the likelihood that the individual will not comply with company policies and procedures.

Table 12
Workplace Aggression Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many heated arguments have you had with coworkers and/or supervisors?	.10	p < .35	100
In the past year, how many physical fights have you had with coworkers and/or supervisors?	.25	p < .015	100
In the past year, how many heated arguments have you had with customers?	.16	p < .111	100
In the past year, how many physical fights have you had with customers?*	—	—	—
In the past year, how many times have you seriously thought about hurting a coworker and/or supervisor?	.41	p < .001	100
In the past year, how many times have you threatened to hurt a coworker and/or supervisor?	.25	p < .012	100
In the past year, how many times have you intentionally damaged company property or merchandise?	.31	p < .003	100
In the past year, how many times have you brought a weapon (e.g., gun, knife) to work without the consent of your employer?	.26	p < .011	100
Overall Workplace Aggression Rating	.33	p < .002	100

Note: N equals the number of participants in the analysis.
*There were no incidents of physical fights with customers for this sample; therefore a validity coefficient could not be calculated.

The results presented here suggest that the A.R.P. Workplace Aggression Scale is a strong predictor of aggressive workplace behaviors. That is, the higher the individual's score is on this Scale, the greater the likelihood that the individual will engage in such behaviors.

Validity Study #2

Data from an additional 62 to 100 employees (the exact number depended on the Scale and the criteria) were collected and analyzed in order to cross-validate the original four-scale version of the A.R.P. Cross-validation provides evidence for the generalization of results to other individuals not included in the original study.

The study sample again included employees from a wide range of jobs. The four scale version of the A.R.P. was administered and anonymous self-report data were collected. Once again, validity coefficients were computed between test scores and past behavior. The results of this analysis are presented below.

Table 13
Integrity Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many times have you stolen from your employer?	.25	p < .019	92
In the past year, what was the approximate dollar value of merchandise or money you stole from your employer?	.37	p < .002	65
In the past year, how many times did you do something behind a supervisor's back that you know he/she would disapprove of?	.35	p < .001	90
In the past year, how many times did you do something behind a coworker's back that you know he/she would disapprove of?	.21	p < .05	90
Overall Integrity Rating	.42	p < .001	65

Note: N equals the number of participants in the analysis.

The results presented here suggest that the A.R.P. Integrity Scale is a strong predictor of each of the criteria collected. That is, the higher the individual's score is on this Scale, the greater the likelihood that the individual will engage in untrustworthy workplace behaviors.

Table 14
Illegal Drug Use Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past six months, how many times did you show up to work intoxicated from the use of illegal drugs (including marijuana, cocaine, crack, etc.)?	.13	p < .30	63
In the past six months, how many times did you consume illegal drugs (including marijuana, cocaine, crack, etc.) during work hours and/or work breaks?	.29	p < .02	63
In the past year, how many times have you gone against your supervisor's wishes?	.49	p< .001	63
In the past year, how many work-related policies have you broken?	.27	p< .04	62
Overall Illegal Drug Use Rating	.27	p < .04	63

Note: N equals the number of participants in the analysis.

Table 15
Workplace Policy Compliance Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many times have you been reprimanded for not following work-related policies and procedures?	.24	p < .015	102
In the past year, how many times have you had unexcused absences from work?	.24	p < .016	102
In the past year, how many times have you called in sick to work when you really were not?	.27	p < .007	102
In the past year, how many times have you worked on personal matters at work behind your supervisor's back?	.08	p < .42	102
In the past year, how many times have you gone against your supervisor's wishes?	.41	p < .001	101
In the past year, how many work-related policies have you broken?	.37	p < .001	101
Overall Workplace Policy Compliance Rating	.42	p < .001	101

Note: N equals the number of participants in the analysis.

Table 16
Workplace Aggression Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many heated arguments have you had with coworkers and/or supervisors?	.39	p < .001	98
In the past year, how many physical fights have you had with coworkers and/or supervisors?	.43	p < .001	98
In the past year, how many heated arguments have you had with customers?	.31	p < .003	95
In the past year, how many physical fights have you had with customers?	.24	p < .019	97
In the past year, how many times have you seriously thought about hurting a coworker and/or supervisor?	.35	p < .001	98
In the past year, how many times have you threatened to hurt a coworker and/or supervisor?	.48	p < .001	98
In the past year, how many times have you intentionally damaged company property or merchandise?	.33	p < .002	98
In the past year, how many times have you brought a weapon (e.g., gun, knife) to work without the consent of your employer?	.27	p < .009	97
Overall Workplace Aggression Rating	.44	p < .001	97

Note: N equals the number of participants in the analysis.

The results of the cross-validation studies for the A.R.P. Scales offer further support for each Scale's validity. The results again demonstrated that the higher the score on each Scale, the greater the likelihood that the individual will engage in counterproductive workplace behaviors.

Correlation analyses were also conducted combining the data for Validity Studies #1 and #2. The results are presented below. By combining the data from both studies, the predictive power of the A.R.P. Scales is evident when you review all the correlation coefficients that are significant at the .05 level or below.

Table 17
Integrity Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many times have you stolen from your employer?	.33	p < .001	192
In the past year, what was the approximate dollar value of merchandise or money you stole from your employer?	.31	p < .001	164
In the past year, how many times did you do something behind a supervisor's back that you know he/she would disapprove of?	.41	p < .001	187
In the past year, how many times did you do something behind a coworker's back that you know he/she would disapprove of?	.31	p < .001	189
Overall Integrity Rating	.47	p < .001	160

Note: N equals the number of participants in the analysis.

Table 18
Illegal Drug Use Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past six months, how many times did you show up to work intoxicated from the use of illegal drugs (including marijuana, cocaine, crack, etc.)?	.47	p < .001	143
In the past six months, how many times did you consume illegal drugs (including marijuana, cocaine, crack, etc.) during work hours and/or work breaks?	.41	p < .001	143
In the past year, how many times have you gone against your supervisor's wishes?	.32	p< .001	142
In the past year, how many work-related policies have you broken?	.31	p< .001	140
Overall Illegal Drug Use Rating	.47	p < .001	143

Note: N equals the number of participants in the analysis.

Table 19
Workplace Policy Compliance Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many times have you been reprimanded for not following work-related policies and procedures?	.27	$p < .001$	198
In the past year, how many times have you had unexcused absences from work?	.25	$p < .001$	199
In the past year, how many times have you called in sick to work when you really were not?	.26	$p < .001$	199
In the past year, how many times have you worked on personal matters at work behind your supervisor's back?	.20	$p < .005$	196
In the past year, how many times have you gone against your supervisor's wishes?	.37	$p < .001$	195
In the past year, how many work-related policies have you broken?	.39	$p < .001$	195
Overall Workplace Policy Compliance Rating	.43	$p < .001$	193

Note: N equals the number of participants in the analysis.

Table 20
Workplace Aggression Scale

Behavioral Criteria	Correlation Coefficient	Significance Level	N
In the past year, how many heated arguments have you had with coworkers and/or supervisors?	.27	p < .001	198
In the past year, how many physical fights have you had with coworkers and/or supervisors?	.36	p < .001	198
In the past year, how many heated arguments have you had with customers?	.24	p < .001	195
In the past year, how many physical fights have you had with customers?	.18	p < .011	197
In the past year, how many times have you seriously thought about hurting a coworker and/or supervisor?	.34	p < .001	198
In the past year, how many times have you threatened to hurt a coworker and/or supervisor?	.40	p < .001	198
In the past year, how many times have you intentionally damaged company property or merchandise?	.30	p < .001	198
In the past year, how many times have you brought a weapon (e.g., gun, knife) to work without the consent of your employer?	.25	p < .001	197
Overall Workplace Aggression Rating	.40	p < .001	197

Note: N equals the number of participants in the analysis.

Validity Study #3

The Integrity Scale was administered to 102 employees employed in a marketing company. The jobs held by these employees included secretary, file clerk, accounting clerk, warehouse personnel, marketing assistant, customer service representative and telemarketing representative. Supervisors were asked to rate the study participants on trustworthiness and overall job performance. These two performance measures are presented below.

	Very Low Level		Average Level			Very High Level	

1. Trustworthiness
Can be trusted. Always candid.
Does not try to deceive. 1 2 3 4 5 6 7

2. Overall Job Performance
Performs all aspects of the job effectively
and efficiently. This is a great employee. 1 2 3 4 5 6 7

Correlation analyses were conducted between test scores and job performance ratings to determine the degree to which the Integrity Scale of the A.R.P. predicted these aspects of job performance. Table 21 shows the significant correlations between Scale scores and supervisor evaluations. These correlations indicate that employees who scored high on this Scale tended to be rated as less trustworthy by their supervisor than employees who scored lower on the Scale.

Table 21
Correlation between the Integrity Scale and Job Performance Rating

Job Performance Dimension	Correlation Coefficient	Significance Level	N
Trustworthiness	-.22	$p < .03$	102
Overall Job Performance	-.23	$p < .03$	102

Note: N equals the number of participants in the analysis.

Validity Study #4

The four-scale version of the A.R.P. was administered as part of a broader validation study to 56 call center representatives. These representatives were responsible for making outbound calls and selling products and services. The supervisors of these study participants were asked to rate them on overall job performance. Table 22 presents the results of this analysis. These results suggest that employees who score high on the A.R.P. perform worse on the job than those that score lower.

Table 22
Correlation between the A.R.P. and Overall Job Performance

Job Performance Dimension	Correlation Coefficient	Significance Level	N
Overall Job Performance	-.24	$p < .079$	56

Note: N equals the number of participants in the analysis.

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Validity Study #5

In addition to the criterion Validity Studies discussed above, a construct validation study was conducted for the Workplace Aggression Scale. Construct validation attempts to answer two questions: (1) What is the psychological construct the assessment is attempting to measure? and (2) How good is the assessment at measuring that construct?

During the administration of the A.R.P. Workplace Aggression Scale in Validity Study #1 and Validity Study #2, participants were also asked to complete the "The Aggression Questionnaire." This 29-item questionnaire scale was developed by Arnold Buss and Mark Perry and published in 1992 primarily as a research tool. Numerous research efforts have found the scale to be a valid measurement of four types of aggressive behaviors (i.e., physical aggression, verbal aggression, anger and hostility).

Correlation analyses were performed between the Workplace Aggression Scale total score and the total score of Buss and Perry's Aggression Questionnaire, as well as its four independent scales. The results of these analyses are presented below.

Table 23

Correlation Coefficients between the A.R.P. Workplace Aggression Scale Scores and Buss and Perry's Aggression Questionnaire Score

Buss and Perry's Aggression Questionnaire Scale	Correlation Coefficient	Significance Level	N
Physical Aggression	.82	p < .001	202
Verbal Aggression	.54	p < .001	206
Anger	.56	p < .001	204
Hostility	.54	p < .001	201
Total Score	.78	p < .001	192

Note: N equals the number of participants in the analysis.

The significant validity coefficients obtained between the A.R.P. Aggression Scale scores and the Aggression Questionnaire scores suggest that the Workplace Aggression Scale is a powerful and valid measurement of various types of aggressive behaviors.

Validity Study #6

Employee turnover and poor attendance have a direct impact on organizational productivity. With the increasing costs of employee recruitment, training and retention efforts, employee turnover significantly affects a company's bottom line. Poor attendance also has a direct impact on an organization's productivity.

While many factors such as organizational culture, the job market and management effectiveness can contribute to turnover and attendance problems, research has found that certain attitudes and personality characteristics can significantly contribute to an individual's employment stability. For example, individuals with lenient attitudes toward poor attendance are more likely to miss work than those that view attendance more seriously.

In addition, the personality characteristic "locus of control" has been linked to attendance and turnover. An individual with an internal locus of control believes his/her actions determine the rewards he/she gets, while those with an external locus of control are of the belief that rewards in life are generally outside of their control. Individuals with an external locus of control have been found to experience more work-related stress and are likely to have less employment stability than those with an internal locus of control.

The Attendance Scale includes test items that measure attitudes towards attendance and reliability, as well as, items that focus on the individual's locus of control. Through research, these items have been statistically proven to predict an individual's level of attendance and other critical work-related behaviors.

The Attendance Scale was administered to 81 employees in a variety of positions (e.g. customer service representatives, computer programmers, clerical staff, managers) in a variety of organizations. Supervisors were asked to rate the study participants on the following critical job dimensions:

	Very Low Level		**Average Level**			**Very High Level**	
1. Reliability Gets the job done with little follow-up or supervision.	1	2	3	4	5	6	7
2. Organization Works in an organized and efficient manner.	1	2	3	4	5	6	7
3. Attendance/Punctuality Has an excellent attendance record. Comes to work on time and is punctual to meetings and other work activities.	1	2	3	4	5	6	7
4. **Overall Job Performance** This individual's overall job performance is exceptional. This is definitely one of our best employees.	1	2	3	4	5	6	7

The Attendance Scale was then statistically compared to the supervisors' performance ratings using correlation analysis. The Table below provides the results of this analysis.

Table 24

Correlations between the Attendance Scale and Job Performance Ratings

Sample	Work-Related Behaviour	Validity Coefficient	Significance Level	N
Employees	Reliability	.42	p < .001	81
	Organization	.30	p < .006	81
	Attendance/Punctuality	.43	p < .001	81
	Overall Job Performance	.49	p < .001	81

Note: N equals the number of participants in the analysis.

These correlations indicate that, in general, those individuals who scored high on the Attendance Scale demonstrated high levels of performance on the job and had significantly higher levels of attendance than those individuals that scored lower.

Validity Study #7

In a second criterion-related validity study the Attendance Scale was administered to 80 employees. Positions included customer service representatives, telemarketing personnel, warehouse personnel, and supervisors. Supervisors were asked to rate each employee on the same performance dimensions included in the Study above. The results of this analysis are presented below.

Table 25

Correlations between the Attendance Scale and Job Performance Ratings

Sample	Work-Related Behaviour	Validity Coefficient	Significance Level	N
Employees	Reliability	.23	p < .042	80
	Organization	.22	p < .046	80
	Attendance/Punctuality	.32	p < .004	80
	Overall Job Performance	.23	p < .045	80

Note: N equals the number of participants in the analysis.

Consistent with the previous validity study, these correlations suggest that, in general, those individuals who scored high on the Attendance Scale were rated higher on attendance and punctuality and other important job dimensions by their supervisors than those individuals who scored lower.

The results obtained in the Validity Studies presented here offer strong evidence that the A.R.P. is a valid predictor of the likelihood that an individual will engage in a wide range of negative workplace behaviors that lead to an unproductive and unsafe working environment.

Reliability

In addition to validity research, internal consistency analyses have been conducted to determine the reliability of the five Scales that make up the A.R.P.; That is, to what degree do the items within each Scale measure the same thing? Reliability coefficients for each Scale are presented below. The results of this analysis strongly suggest that the items within each scale are homogeneous in nature (i.e., they measure the same construct or work behavior).

Table 26
Reliability Coefficients for the A.R.P. Scales

A.R.P. Scale	Reliability Coefficient
Integrity	.70
Illegal Drug Use	.88
Workplace Policy Compliance	.75
Workplace Aggression	.80
Attendance	.80

The research presented here strongly suggests that the A.R.P. is a valid and reliable predictor of four counterproductive behaviors or characteristics that can lead to financial losses for the organization, nonadherence to company policies and an unsafe working environment. Incorporating this instrument into your selection process will add objectivity to your decision-making process and will help you hire the best candidate 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 Applicant Risk Profiler 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 this or any other HR•Assessments® product, call toll-free 800-264-0074.