

Chapter 6

Selecting Employees Who Fit

A MANAGER'S PERSPECTIVE

JAVIER'S MESSAGE FROM THE HUMAN RESOURCE DEPARTMENT FILLS HIM WITH BOTH ANXIETY AND EXCITEMENT. HE HAS JUST RECEIVED AUTHORIZATION TO HIRE AN ADDITIONAL MEMBER FOR HIS CUSTOMER SERVICE TEAM. JAVIER IS EXCITED BECAUSE HIRING THE RIGHT PERSON COULD REALLY BOOST THE TEAM'S PERFORMANCE; HE IS ANXIOUS BECAUSE THIS WILL BE HIS FIRST HIRING DECISION.

Javier has total freedom to hire anybody he wants. What should he focus on when he makes his hiring decision? Should he hire someone who is likely to stay with the company for a long time? Should he look for someone who already has the skills to do the job? Is it more important to hire someone with the potential to be a high performer in several different jobs? Should he try to find someone who is similar to current team members, or should he bring in new ideas by hiring someone very different?

One reason for Javier's anxiety is a story he recently heard where a manager in a different department asked a number of illegal questions during an interview. He has also heard a number of stories about managers being evaluated

negatively because they spent too much money searching for employees. Javier has a general idea of the questions that should be avoided when conducting interviews, but he makes himself a note to be sure to ask someone from the human resource department to remind him of potentially problematic questions. He also wants to get some help identifying the most cost-effective hiring methods.

Javier also thinks about the specific methods he might use to evaluate people. He has participated in several job interviews, and he knows that interviews are important. But what questions should he ask? Should he ask everyone the same questions? Will he be able to judge whether an answer is good or bad? Should he have someone else interview a group of finalists for the job?

Javier knows he won't have time to interview everyone who will apply. How should he screen applicants? A friend recently told him about using personality tests for hiring. Javier also remembers taking some type of intelligence test when he applied for a different job a number of years ago. He thought the intelligence test was kind of





THE BIG PICTURE *Effective Organizations Develop Employee Selection Strategies That Include Tests and Assessments to Help Them Hire the Right People*

interesting, but he wonders if such tests really help organizations identify successful employees. Would using tests help him make a better hiring decision? If so, how can he identify the tests that he should use? What about reference checking? He would like to talk to previous employers, but he knows that the policy of his own company is not to give references. Would it be worth the effort to try checking references?

How should the results of several different assessments be combined to arrive at a final hiring decision if he uses tests, reference checking, and interviewing? Would it be best to give scores on all of the measures the same emphasis? Should he give more weight to the interview? The hiring decision is an important one for Javier, as he well knows. He can prove himself as an up and coming leader if he makes a good choice. Not only that, his job as team leader will become easier if he hires a new team member who is a real contributor.



WHAT DO YOU THINK?

Suppose you are listening to a conversation between Javier and another manager, Elena. Elena makes the following statements. Which of the statements do you think are true?

- T OR F** You should hire people who already have the skills and knowledge they will need on the job.
- T OR F** The benefits of making good hiring decisions are highest when the organization has a lot of job applicants.
- T OR F** Intelligence tests are very helpful for predicting who will be effective in almost any job.
- T OR F** Reference checking provides valuable information about prospective employees.
- T OR F** You need to ask each job applicant individualized questions to determine his or her true strengths and weaknesses.

LEARNING OBJECTIVES

After reading this chapter you should be able to:

- LEARNING OBJECTIVE 1** Describe how employee selection practices can strategically align with overall HR strategy.
- LEARNING OBJECTIVE 2** Explain what makes a selection method good; be able to apply the concepts of reliability, validity, utility, legality and fairness, and acceptability to appropriately evaluate different employee selection methods.
- LEARNING OBJECTIVE 3** Describe several commonly used selection methods, evaluate their strengths and weaknesses, and explain how they link with particular employee selection strategies.
- LEARNING OBJECTIVE 4** Explain how to combine scores from several different selection methods to arrive at a final selection decision.

How Can Strategic Employee Selection Improve an Organization?

Employee selection

The process of testing and gathering information to decide whom to hire.

Employee selection is the process of choosing people to bring into an organization. Effective selection provides many benefits. Selecting the right employees can improve the effectiveness of other human resource practices and prevent numerous problems. For instance, hiring highly motivated employees who fit with the organizational culture can reduce disciplinary problems and diminish costs related to replacing employees who quit. Such benefits help explain why organizations that use effective staffing practices have higher annual profit and faster growth of profit.¹ In short, a strategic approach to selecting employees can help an organization obtain and keep the talent necessary to produce goods and services that exceed the expectations of customers.

An interesting example of employee hiring was the 2010 census in the United States. Every ten years the government is required by the Constitution to locate and count each person. Much of the counting is done by mail, but about 35 million households fail to respond to mail requests for information. This means that the Census Bureau must hire workers, called enumerators, to visit households and seek census information. For the 2010 census over 1 million people were hired to work as enumerators for a three-month period from May until August. Most of them worked part-time in the evenings and weekends when the people they were counting were most likely to be home.²

Just imagine the immense task of hiring over 1 million workers. The first action for the Census Bureau was to establish a list of qualifications for enumerators. Enumerators needed to be 18 years old, have a driver's license and available transportation, and a clean criminal record. Applicants who spoke multiple languages were also sought. Once a list of qualifications was made, the next step was to generate a pool of applicants. In early 2010 this was very easy, as there were a large number of unemployed people looking for work. In fact, the Census Bureau attracted applications from many highly qualified people with advanced degrees and corporate experience. Applicants were willing to work in part-time jobs that paid about \$12 per hour.³

People interested in working as an enumerator visited the Census Bureau website to learn about the job. The website included written information and

a short video that described the job of enumerator. The website directed them to local offices where they could formally apply for a position. The use of local offices was a critical part of the hiring strategy. The Census Bureau had determined that it was best to hire people who would work in their local communities. This preference was based on the notion that respondents are more willing to talk to people from their own community. Local offices also administered a 28-question test of clerical skills and basic mental abilities. The test helped identify the people who had the skills necessary to locate people, interview them successfully, and accurately report their findings. The overall hiring strategy thus included a centralized website that provided information and served as a gateway for applications, but final hiring decisions were made by managers in the field.⁴



Building Strength Through HR

U.S. CENSUS BUREAU

The U.S. Census Bureau is a government agency that hired over 1 million temporary workers to complete the 2010 census. Hiring practices at the Census Bureau that facilitated this process included



- Determining the skills needed to perform the job and identifying recruits likely to have those skills.
- Combining the efficiency of a centralized website with local hiring decisions that left final decisions in the hands of managers who would actually be working with the new hires.
- Creating a paper-and-pencil test that helped screen out applicants who would not be able to perform the job successfully.

LEARNING OBJECTIVE 1

How Is Employee Selection Strategic?

As we can see from the Census Bureau example, hiring the right employees often takes a great deal of planning. An organization's employee selection practices are strategic when they ensure that the right people are in the right places at the right times. This means that good selection practices must fit with an organization's overall HR strategy. As described in Chapter 2, HR strategies vary along two dimensions: whether they have an internal or an external labor orientation and whether they compete through cost or differentiation. These overall HR strategies provide important guidance about the type of employee selection practices that will be most effective for a particular organization.

ALIGNING TALENT AND HR STRATEGY

Figure 6.1 shows how selection decisions can be aligned with the HR strategies outlined in Chapter 2. Consistent with the overall HR strategies, strategic selection decisions are based on two important dimensions. The horizontal dimension of Figure 6.1 represents differences in the type of talent sought. At one end of the continuum is *generalist talent*—employees who may be excellent workers but who do not have particular areas of expertise or specialization. Most of the people being hired as census enumerators would fit in this category. At the other end of the continuum is *specialist talent*—employees with specific and somewhat rare skills and abilities.⁵

The vertical dimension of Figure 6.1 represents the type of relationship between the employees and the organization. At one end of the continuum is *long-term talent*. Employees in this category stay with the organization for a long time and develop a deep understanding of company practices and operations. At the other end of the continuum is *short-term talent*. These employees move from organization to organization without developing expertise in how things are done at any particular place.⁶ Given that they only worked with the Census Bureau for a few months, enumerators for the 2010 census represented short-term talent.

Combining the two dimensions yields four general categories: short-term generalist talent, long-term generalist talent, long-term specialist talent, and short-term specialist talent. Next, we look at each of these categories in turn and consider how they fit with the HR strategies introduced in Chapter 2.

Short-Term Generalists

If you were hired to work at a drive-in restaurant, you would not need specialized skills, you would not earn high wages, and you probably would not keep the job for a very long time. Fast-food workers are **short-term generalists**, who provide a variety of different inputs but do not have areas of special skill or ability. Other examples include some retail sales clerks and hotel housekeepers. Short-term generalist talent is most often associated with the Bargain Laborer HR strategy.⁷ Organizations with this HR strategy fill most positions

Short-term generalists

Workers hired to produce general labor inputs for a relatively short period of time.

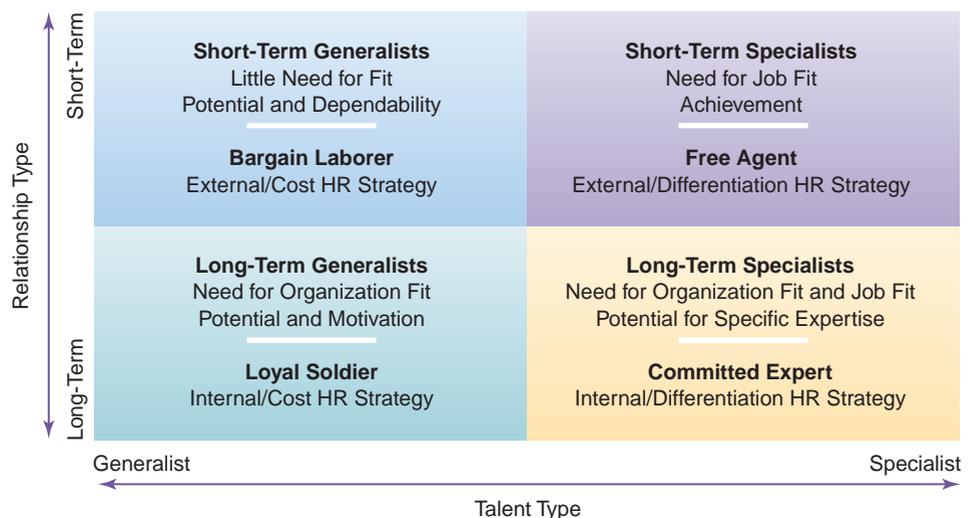


Figure 6.1 Strategic Framework for Employee Selection.

by hiring people just entering the workforce or people already working in similar jobs at other companies. Selection has the objective of identifying and hiring employees to produce low-cost goods and services, and selection decisions are based on identifying people who can perform simple tasks that require little specialized skill.

Hiring generalists can be beneficial because people without specialized skills do not generally demand high compensation, which keeps payroll costs as low as possible. Because generalists lack specific expertise, they also are usually more willing to work in routine jobs and do whatever they are asked.

Long-Term Generalists

If you were to take a job working for an electricity provider, you might not need specialized skills, but you would most likely plan to remain with the organization for a long career. People working for utility companies are often **long-term generalists** who do not have technical expertise but who develop skills and knowledge concerning how things are done in a specific organization. Other common examples of long-term generalists are people who work for government agencies and for some package delivery companies. These workers contribute in a number of areas but do not need specific technical skills and abilities. Long-term generalists are beneficial for organizations using the Loyal Soldier HR strategy.⁸ Organizations with this HR strategy focus on keeping employees once they are hired. Staffing still has the objective of hiring employees to produce low-cost goods and services, but a stronger commitment is formed, and efforts are made to identify people who will remain with the organization for a long time.

The generalist's lack of specific expertise allows firms to reduce payroll costs. Here, however, employees develop skills and abilities over time that are only valuable to the specific organization, which reduces the likelihood that they will move to another employer. People develop relationships and form a strong sense of commitment to the organization as they work in many different jobs over a long period of time.

Long-Term Specialists

Suppose you took a job as an accountant with a large firm that makes and sells consumer goods such as diapers and cleaning products. People doing this job are most often **long-term specialists** who develop deep expertise in a particular area. Pharmaceutical sales representatives and research scientists are also commonly employed as long-term specialists. People in these jobs are expected to develop specialized skills and stay with the organization for a long time. The use of long-term specialists fits the Committed Expert HR strategy.⁹ Organizations that use this HR strategy develop their own talent. Selection has the objective of identifying people capable of developing expertise in a particular area so that they can innovate and produce superior goods and services over time.

Hiring people who can develop specialized skills over time enables organizations to create and keep a unique resource of talent that other organizations do not have. Employees are given the time and assets to develop the skills they need to be the best at what they do.

Short-Term Specialists

Information technology specialists often work as **short-term specialists**—employees who provide specific inputs for relatively short periods of time.

Long-term generalists

Workers hired to perform a variety of different jobs over a relatively long period of time.

Long-term specialists

Workers hired to develop specific expertise and establish a lengthy career within an organization.

Short-term specialists

Workers hired to provide specific labor inputs for a relatively short period of time.

These workers are valuable for organizations using the Free Agent HR strategy.¹⁰ Organizations with this HR strategy hire people away from other organizations. Staffing is aimed at hiring people who will bring new skills and produce innovative goods and top-quality service, and selection decisions focus on identifying people who have already developed specific skills. Other examples of this type of talent include investment bankers and advertising executives.

Hiring short-term specialists allows firms to quickly acquire needed expertise. New hires bring unique knowledge and skills to the organization. The organization pays a relatively high price for such knowledge and skills but makes no long-term commitments.

MAKING STRATEGIC SELECTION DECISIONS

Another way to examine how organizations make employee selection decisions focuses on two primary factors: the balance between job-based fit and organization-based fit and the balance between achievement and potential. As you can see in Figure 6.1, both factors relate clearly to the talent categories just discussed.

Balancing Job Fit and Organization Fit

The first area of balance concerns whether employees should be chosen to fit in specific jobs or to fit more generally in the organization. When **job-based fit** is the goal, the organization seeks to match an individual's abilities and interests with the demands of a specific job. This type of fit is highly dependent on a person's technical skills. For instance, high ability in mathematics results in fit for a job such as financial analyst or accountant. In contrast, **organization-based fit** is concerned with how well the individual's characteristics match the broader culture, values, and norms of the firm. Organization-based fit depends less on technical skills than on an individual's personality, values, and goals.¹¹ A person with conservative values, for example, might fit well in a company culture of caution and tradition. Employees who fit with their organizations have higher job satisfaction, and better fit with the organization has been shown to lead to higher performance in many settings.¹² As described in the "How Do We Know?" feature, an interviewer's perception of job-based fit can be very different from the same interviewer's perception of organization-based fit.

As suggested earlier, we can combine the concept of fit with the talent-based categories discussed earlier. In general, job-based fit is more important in organizations that seek to hire specialists than in those that seek generalists. Similarly, organization-based fit is more important for long-term than for short-term employees. These differences provide strategic direction for employee selection practices.

Organizations pursuing Bargain Laborer HR strategies and seeking short-term generalists are not highly concerned about either form of fit. Employees do not generally bring specific skills to the organization. Neither are they expected to stay long enough to necessitate close organizational fit. Thus, for firms pursuing a Bargain Laborer HR strategy, fit is not strategically critical, and hiring decisions tend to focus on obtaining the least expensive labor regardless of fit.

Organizations pursuing the Loyal Soldier HR strategy and seeking long-term generalists benefit from hiring employees who fit with the overall

Job-based fit

Matching an employee's knowledge and skills to the tasks associated with a specific job.

Organization-based fit

Matching an employee's characteristics to the general culture of the organization.



How Do We Know?

DO RECRUITERS REALLY ASSESS FIT?

What do interviewers think about when deciding whom to hire? Do they pay attention to specific job skills? How about values and personality traits? Do all interviewers focus on the same things? Amy Kristof-Brown conducted two studies to answer these questions. In the first study, 31 recruiters from consulting organizations viewed videotapes of students being interviewed. The recruiters also looked at the résumés of the students. They then indicated which of the students they thought would fit best with their organizations and with particular jobs. The recruiters were also asked to explain the characteristics they used to make their assessments of fit. In the second study, a different group of 46 recruiters conducted actual interviews with students for jobs in consulting firms. After the interviews, the recruiters provided ratings of perceived job fit and organization fit and made hiring recommendations.

The first study found that the recruiters used measures of specific knowledge, skills, and abilities to predict job-based fit, whereas they relied more on values and personality traits to predict organization-

based fit. Interestingly, however, the skills, abilities, traits, and values that were seen as important for fit often differed for recruiters from the same organization. The second study showed that job-based fit and organization-based fit involved two different judgments and that the recruiters took both kinds of fit into account when making hiring decisions.

The Bottom Line. Job-based fit and organization-based fit involve two different perceptions. Recruiters base their decisions about these two types of fit on different types of information. Unfortunately, a given recruiter's perceptions of fit may be based on his or her unique beliefs. Professor Kristof-Brown concludes that organizations can benefit from finding out which recruiters have the most accurate judgments of fit. Other recruiters can then be trained to use the same information to improve their judgments.

Source: Amy Kristof-Brown, "Perceived Applicant Fit: Distinguishing between Recruiters' Perceptions of Person-Job and Person-Organization Fit," *Personnel Psychology* 53 (2000): 643–671.

organization. Job-based fit is not critical. Employees rotate through a number of jobs, and success comes more from loyalty and high motivation than from specific skills. In contrast, lengthy expected careers make fit with the organization very important. Employee selection decisions in organizations with a Loyal Soldier HR strategy should thus focus primarily on assessing personality, values, and goals.

Organizations pursuing a Committed Expert HR strategy and seeking long-term specialists require both job-based fit and organization-based fit. Organization-based fit is necessary because employees need to work closely with other members of the organization throughout long careers. Job-based fit is necessary because employees are expected to develop expertise in a specific area. Even though new employees may not yet have developed specific job skills, general aptitude in the specialized field, such as accounting or engineering, is important. Selection decisions in firms pursuing Committed Expert HR strategies should thus be based on a combination of technical skills and personality, values, and goals.

Job-based fit is critical for organizations pursuing a Free Agent HR strategy and seeking short-term specialists. These organizations hire employees specifically to perform specialized tasks and expect them to bring required knowledge and skills with them. An employee's stay with the organization is

expected to be relatively short, which means that fit with the organization is not critical. Selection decisions in organizations with a Free Agent HR strategy should thus focus primarily on assessing technical skills and abilities.

Balancing Achievement and Potential

The second area of balance concerns whether employees should be chosen because of what they have already achieved or because of their potential for future accomplishments. Assessments aimed at measuring **achievement** focus on history and past accomplishments that reveal information about acquired abilities and skills. For instance, a job applicant for an elementary school teaching position might have graduate degrees and years of experience that demonstrate teaching skills. In contrast, assessments aimed at measuring **potential** are future-oriented and seek to predict how a person will learn and develop knowledge and skill over time.¹³ In this case, an applicant for an elementary teaching position may just have graduated with high honors from a prestigious university, demonstrating high potential.

Again, we can relate the choice between achievement and potential to the framework in Figure 6.1. Organizations that use Bargain Laborer HR strategies seek short-term generalists for jobs that do not require highly developed skills.¹⁴ Measures of achievement are not required. For these organizations, selection methods assess potential by predicting whether applicants will be dependable and willing to carry out assigned tasks.

Hiring people based on potential is critical for organizations with long-term staffing strategies. These organizations provide a great deal of training, which suggests that people learn many skills after they are hired. With a Loyal Soldier HR strategy, selection measures should focus on ability, motivation, and willingness to work in a large variety of jobs. For a Committed Expert HR strategy, the focus is on assessing potential to become highly skilled in a particular area.

Organizations seeking short-term specialists focus on measuring achievement, because they seek employees who already have specific skills. Required skills change frequently, and a general lack of training by the organization makes it very difficult for these employees to keep up with new technologies. Hiring practices for organizations with Free Agent HR strategies thus focus on identifying individuals who have already obtained the necessary skills and who have demonstrated success in similar positions.

Gaining Competitive Advantage from Alignment

Of course, not all organizations have selection practices that are perfectly aligned with overall HR strategies. Some firms hire long-term generalists even though they have a Free Agent HR strategy. Other firms hire short-term specialists even though they have a Bargain Laborer HR strategy. The selection practices in such organizations are not strategic, and the organizations often fail to hire employees who can really help them achieve their goals. In short, organizations with closer alignment between their overall HR strategies and their specific selection practices tend to be more effective. They are successful because they develop a competitive advantage by identifying and hiring employees who fit their needs and strategic plans.¹⁵ What works for one organization may not work for another organization with a different competitive strategy. A key for effective staffing is thus to balance job fit and organization fit, as well as achievement and potential, in ways that align staffing practices with HR strategy.

Achievement

A selection approach emphasizing existing skills and past accomplishments.

Potential

A selection approach emphasizing broad characteristics that foreshadow capability to develop future knowledge and skill.



CONCEPT CHECK

1. *What are the four types of talent, and how do they fit with the four approaches to overall HR strategy?*
2. *What is the difference between organization fit and job fit, and which is most critical for each of the HR strategies?*
3. *How do achievement and potential fit with strategic selection?*

LEARNING OBJECTIVE 2

What Makes a Selection Method Good?

We have considered strategic concerns in employee selection. The next step is to evaluate specific methods that help accomplish strategy. How can an organization go about identifying tests or measures that will identify people who fit or who have the appropriate mix of potential and achievement? Should prospective employees be given some type of paper-and-pencil test? Is a background check necessary? Will an interview be helpful? If so, what type of interview is best? Answers to the questions provide insights about the accuracy, cost effectiveness, fairness, and acceptability of various selection methods. Next, we examine a few principles related to each question. These principles include reliability, validity, utility, legality and fairness, and acceptability. Figure 6.2 illustrates basic questions associated with each principle.

RELIABILITY

Reliability is concerned with consistency of measurement. An example that illustrates this concept relates to a simple bathroom scale. Suppose you wake up one morning and step on the scale. The number on the scale says 150 pounds. You brush your teeth and step back on the scale. It says 180 pounds. We know enough about weight to be quite certain that your weight has not varied this much in such a short period. We say that the scale is unreliable. It does not yield consistent values from measurement to measurement.

Reliability

An assessment of the degree to which a selection method yields consistent results.



Figure 6.2 What Makes a Selection Method Good?

Consider another example of a reliability problem. Imagine that two coaches for a football team have just returned from separate recruiting trips. They are meeting to discuss the recruits they visited. The first coach describes a great recruit who weighs 300 pounds. The second coach reports about someone able to bench press 500 pounds. Which player should the coaches select? It is impossible to compare the recruits, since different information was obtained about each person. The measures are not reliable.

The football example may seem a bit ridiculous, but it is not much different from what happens in many organizations. Just think of the interview process. Suppose five different people interview a person for a job. In many organizations, the interviewers' judgments would not be consistent.

How, then, can we determine whether a selection method is reliable? One way to evaluate reliability is to test a person on two different occasions and then determine whether scores are similar across the two times. We call this the **test-retest method** of estimating reliability. Another way to evaluate reliability is to give two different forms of a test. Since both tests were designed to measure the same thing, we would expect people's scores to be similar. This is the **alternate-forms method** of estimating reliability. A similar method involves the use of a single test that is designed to be split into two halves that measure the same thing. The odd- and even-numbered questions might be written so that they are equivalent. We call this the **split-halves method** of estimating reliability. A final method, called the **inter-rater method**, involves having different raters provide evaluations and then determining whether the raters agree.

Each method of estimating reliability has its own strengths and weaknesses. However, all four methods rely on the **correlation coefficient**, a numerical indicator of the strength of the relationship between two sets of scores. Correlation coefficients range from a low of 0, which indicates no relationship, to a high of 1, which indicates a perfect relationship. Figure 6.3 provides an illustration of correlation coefficients. Two scores for each person are represented in the graph. The first score is plotted on the horizontal axis, and the second score is plotted on the vertical axis. Each person's two scores are thus represented by a dot. In the graph representing a low correlation, you can see that some people who did very well the first time did not do well the second time. Others improved a lot the second time. The scores are quite scattered, and it would be difficult to predict anyone's second score based on his or her first score. In the graph representing a high correlation, the scores begin to follow a straight line. In fact, scores with a correlation of 1 would plot as a single line where each person's second score could be predicted perfectly by his or her first score.

Correlation coefficients can also be negative (indicating that high scores on one measure are related to low scores on the other measure), but we do not generally observe negative correlations when assessing reliability. When it comes to reliability estimates, a higher correlation is always better. A correlation coefficient approaching 1 tells us that people who did well on one of the assessments generally did well on the other.

Just how high should a reliability estimate be? Of course, this depends on many different aspects of the assessment situation. Nevertheless, a good guideline is that a correlation coefficient of .85 or higher suggests adequate reliability for test-retest, alternate-forms, and split-halves estimates.¹⁶ Inter-rater reliability estimates are often lower because they incorporate subjective judgment, yet high estimates are still desirable.

Test-retest method

A process of estimating reliability that compares scores on a single selection assessment obtained at different times.

Alternate-forms method

A process of estimating reliability that compares scores on different versions of a selection assessment.

Split-halves method

A process of estimating reliability that compares scores on two parts of a selection assessment.

Inter-rater method

A process of estimating reliability that compares assessment scores provided by different raters.

Correlation coefficient

A statistical measure that describes the strength of the relationship between two measures.

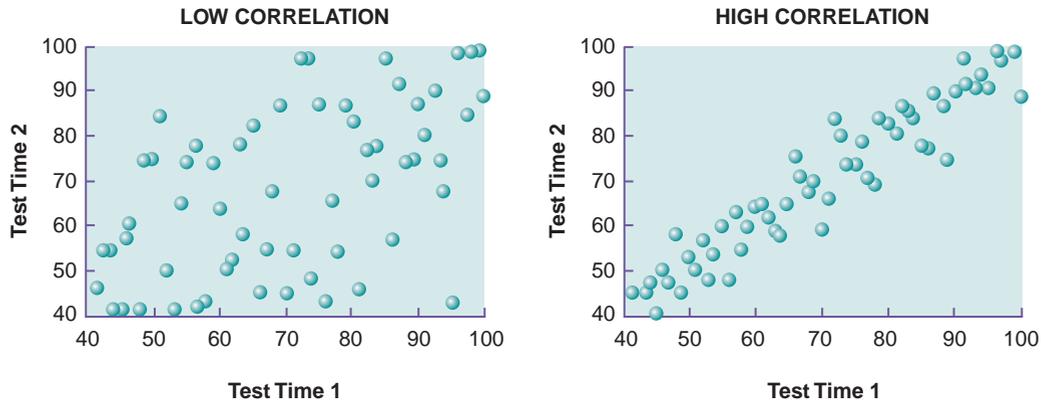


Figure 6.3 Graphical Illustration of Correlations.

Knowing in general how high reliability estimates should be makes managers and human resource specialists better consumers of selection procedures. Consulting firms and people within an organization often propose many different selection methods. Important decisions must be made about which of the many possible methods to use. The first question to ask about any selection procedure is whether it is reliable. Information about reliability should be available from vendors who advocate and sell specific tests and interview methods.

VALIDITY

Once reliability has been established, we can turn to a selection method's validity. Suppose the football coaches in the earlier example have been taught about reliability. They go back to visit the recruits again and obtain more information. This time they specifically plan to obtain consistent information. When they report back, one of the coaches states that his recruit drives a blue car. The second coach says that his recruit drives a green car. The problem of reliability has been resolved. The coaches are now providing the same information about the two recruits. However, this information most likely has nothing to do with performance on the football field. We thus conclude that the information does not have **validity**, which means that it is not relevant for job performance.

How do we know if a test is valid? Evidence of validity can come in many forms, and assessments of validity should take into account all evidence supporting a relationship between the assessment technique and job performance.¹⁷ Nevertheless, as with reliability, certain methods for determining validity are most commonly used.

One method, called **content validation strategy**, involves determining whether the content of the assessment method is representative of the job situation. For instance, a group of computer programmers might be asked to look at a computer programming test to determine whether the test measures knowledge needed to program successfully. The experts match tasks from the job description with skills and abilities measured by the test. Analyses are done to learn if the experts agree. The content validation strategy thus relies on expert judgments, and validity is supported when experts agree that the content of the assessment reflects the knowledge needed to perform well

Validity

The quality of being justifiable. To be valid, a method of selecting employees must accurately predict who will perform the job well.

Content validation strategy

A process of estimating validity that uses expert raters to determine if a test assesses skills needed to perform a certain job.

Criterion-related validation strategy

A process of estimating validity that uses a correlation coefficient to determine whether scores on tests predict job performance.

Predictive validation strategy

A form of criterion-related validity estimation in which selection assessments are obtained from applicants before they are hired.

Concurrent validation strategy

A form of criterion-related validity estimation in which selection assessments are obtained from people who are already employees.

on the job. Content validation is a particularly important step for developing new tests and assessments. As a student, you see content validation each time you take an exam. The course instructor acts as an expert who determines whether the questions on the exam are representative of the course material.

A second method for determining validity is known as the **criterion-related validation strategy**. This method differs from the content validation strategy in that it uses correlation coefficients to show that test or interview scores are related to measures of job performance. For example, a correlation coefficient could be calculated to measure the relationship between a personality trait and the dollars of business that sales representatives generate. A positive correlation coefficient can indicate that those who have high scores on a test of assertiveness generate more sales. In this case, a negative correlation coefficient might also be instructive, as it would indicate that people who have lower scores on a particular trait, such as anxiety, have higher sales figures. Either way, the test scores will be helpful for making hiring decisions and predicting who will do well in the sales position.

In practice, two methods can be used to calculate criterion-related validity coefficients. One method uses the **predictive validation strategy**. Here, an organization obtains assessment scores from people when they apply for jobs and then later measures their job performance. A correlation coefficient is calculated to determine the relationship between the assessment scores and performance. This method is normally considered the optimal one for estimating validity. However, its use in actual organizations presents certain problems. One problem is that it requires measures from a large number of people. If an organization hires only one or two people a month, it might take several years to obtain enough information to calculate a proper correlation coefficient. Organizations may also be reluctant to pay for assessments, especially when they do not have evidence that the assessments are really useful for predicting performance.

A second method for calculating validity coefficients uses the **concurrent validation strategy**. Here, the organization obtains assessment scores from people who are already doing the job and then calculates a correlation coefficient relating those scores to performance measures that already exist. In this case, for example, a personality test could be given to the sales representatives already working for the organization. A correlation coefficient could be calculated to determine whether sales representatives who score high on the test also have high sales figures. This method is somewhat easier to use, but it too has drawbacks. One problem is that the existing sales representatives do not complete the personality assessment under the same conditions as job applicants. Applicants may be more motivated to obtain high scores and may also inflate their responses to make themselves look better. Existing sales representatives may have also learned things and changed in ways that make them different from applicants, which might reduce the accuracy of the test for predicting who will perform best when first hired.

Neither the predictive nor the concurrent strategy is optimal in all conditions. However, both yield important information, and this information comes in the form of a correlation coefficient. How high should this correlation coefficient be? Validity coefficients are lower than reliability coefficients. This is because a reliability coefficient represents the relationship between two things that should be the same. In contrast, a validity coefficient represents a relationship between two different things: the test or interview and job performance. Correlation coefficients representing validity rarely exceed .50.

Many commonly used assessment techniques are associated with correlation coefficients that range from .25 to .50, and a few that are useful range from .15 to .25. This suggests that, as a guideline for assessing validity, a coefficient above .50 indicates a very strong relationship, coefficients between .25 and .50 indicate somewhat strong relationships, and correlations between .15 and .25 weaker but often important relationships.¹⁸ Once again, this information can help managers and human resource specialists become better consumers of assessment techniques. As with reliability, information about validity should be available for properly developed selection methods.

One additional concept related to validity is generalizability, which concerns the extent to which the validity of an assessment method in one context can be used as evidence of validity in another context. In some cases, differences in the job requirements across organizations might result in an assessment that is valid in one context but not in another. For instance, a test that measures sociability may predict high performance for food servers in a sports bar but not for servers in an exclusive restaurant. This is known as **situational specificity**. In other cases, differences across contexts do not matter, and evidence supporting validity in one context can be used as evidence of validity in another context, a condition known as **validity generalization**. A common example of a personality trait that exhibits generalization is conscientiousness. Being organized and goal oriented seems to lead to high performance regardless of the work context. We return to this subject later in discussions about different forms of assessment.

UTILITY

The third principle associated with employee selection methods is **utility**, which concerns the method's cost effectiveness. Think back to the football example. Suppose the university has decided to give all possible recruits a one-year scholarship, see how they do during the year, and then make a selection decision about which players to keep on the team. (For the moment, we will ignore NCAA regulations.) Given an entire year to assess the recruits, the university would likely be able to make very good selection decisions, but the cost of the scholarships and the time spent making assessments would be extremely high. Would decisions be improved enough to warrant the extra cost?

Several factors influence the cost effectiveness, or utility, of a selection method. The first issue concerns validity. All other things being equal, selection methods with higher validity also have higher utility. This is because valid selection methods result in more accurate predictions. In turn, more accurate predictions result in higher work performance, which leads to greater organizational profitability.

A second issue concerns the number of people selected into a position. An organization can generate more money when it improves its hiring procedures for jobs it fills frequently. After all, a good selection procedure increases the chances of making a better decision each time it is used. Even though each decision may only be slightly better than a decision made randomly or with a different procedure, the value of all the decisions combined becomes substantial. This explains why even selection decisions with moderate to low validity may have high utility.

A third issue concerns the length of time that people stay employed. Utility is higher when people remain in their jobs for long periods of time. This principle is clear when we compare the probable monetary return of making

Situational specificity

The condition in which evidence of validity in one setting does not support validity in other settings.

Validity generalization

The condition in which evidence of validity in one setting can be seen as evidence of validity in other settings.

Utility

A characteristic of selection methods that reflects their cost effectiveness.

a good selection decision for someone in a summer job versus someone in a 40-year career. Hiring a great employee for a few months can be very helpful. Hiring a great employee for an entire career, however, can yield a much greater financial benefit.

A fourth issue that influences utility is performance variability. To understand this concept, think about the difference in performance of good and bad cooks at a fast-food restaurant versus the difference in performance of cooks at an elite restaurant. The fast-food cooking process is so standardized that it usually does not matter who cooks the food. In this case, making a great selection decision has only limited value. In contrast, the cooking process at an elite restaurant requires the cook to make many decisions that directly influence the quality of the food. Selecting a good cook in this situation is often the difference between a restaurant's success and failure. Measuring performance variability for specific jobs can be somewhat difficult. Just what is the dollar value associated with hiring a good candidate versus a bad one? A number of studies suggest that salary provides a good approximation of this value.¹⁹ Variability in performance increases as salary increases. The dollar value of hiring a good company president is greater than the dollar value of hiring a good receptionist, and this difference is reflected in the higher compensation provided to the CEO.

A fifth issue involves the ratio of applicants to hires for a particular position and concerns how choosy an organization can be. An organization that must hire three out of every four applicants is much less choosy than an organization that hires one out of every ten. If an organization hires almost everyone who applies, then it will be required to hire people even when the selection method suggests that they will not be high performers. Because people are hired regardless of the assessment results, very little value comes from developing quality selection procedures. In contrast, an organization that receives a large number of applications for each position can benefit from good selection techniques that help accurately predict which of the applicants will be the highest performer.

Still another issue related to utility is cost. Cost issues associated with selection methods can be broken into two components: fixed costs associated with developing an assessment method and variable costs that occur each time the method is used. For example, an organization may decide to use a cognitive ability test to select computer programmers. The organization will incur some expenses in identifying an appropriate test and training assessors to use it. This cost is incurred when the test is first adopted. Most likely, the organization will also pay a fee to the test developer each time it gives the test to a job applicant. In sum, utility increases when both fixed and variable costs are low. In general, less expensive tests create more utility, as long as their validity is similar to that of more expensive tests.

Let's look more closely at the variable costs of the assessment. Because it costs money for each person to take an assessment, utility decreases as the number of people tested or interviewed increases. However, there is a trade-off between the number of people being assessed and selectivity. Unless a test has low validity and is very expensive, the tradeoff usually works out such that the costs associated with giving the test to a large number of people are outweighed by the advantages of being choosy and hiring only the very best applicants.

Table 6.1 summarizes factors that influence utility. Of course, dollar estimates associated with utility are based on a number of assumptions and represent predictions rather than sure bets. Just like predictions associated with

Table 6.1 *Factors Influencing Utility of Selection Methods*

Factor	Utility	When . . .
Validity	↑	selection test accuracy increases.
Number	↑	more people are hired into that position.
Tenure	↑	people who are hired stay with the organization for longer time periods.
Performance variation	↑	there is a lot of variation in how well people do the job.
Selectivity	↑	a smaller proportion of applicants are hired.
Fixed cost	↓	it is expensive to establish procedures to use the test.
Variable cost	↓	the cost of each test that is given is high.
Number	↓	you give the test to a lot of people.

financial investments, marketing predictions, and weather forecasting, these estimates will often be wrong. Some research even suggests that providing managers with detailed, complex cost information does not help persuade them to adopt the best selection methods.²⁰ This does not, however, mean that cost analyses are worthless. Utility estimates can be used to compare human resource investments with other investments such as buying machines or expanding market reach. Estimates are also more likely to be accepted by managers when they are presented in a less complex manner and when they are framed as opportunity costs.²¹ Managers can use utility concepts to guide their decisions. For instance, managers should look for selection procedures that have high validity and relatively low cost. They should focus their attention on improving selection decisions for jobs involving a large number of people who stay for long periods of time. They should also focus on jobs in which performance of good and bad employees varies a great deal and in which there are many applicants for each open position.

LEGALITY AND FAIRNESS

The fourth principle associated with selection decisions concerns legality and fairness. Think back to the football example again. Suppose the coaches decided to select only recruits who could pass a lie detector test. Is this legal? Chapter 3 specifically described a number of legal issues associated with human resource management.

Validity plays an important role in the legality of a selection method. As we discussed in Chapter 3, if a method results in lower hiring rates for members of a protected subgroup of people—such as people of a certain race—then adverse impact occurs. In this case, the company carries the burden of proof for demonstrating that its selection methods actually link with higher job performance. Because adverse impact exists in many organizations, being able to demonstrate validity is a legal necessity.

High validity may make it legal for an organization to use a test that screens out some subgroups at a higher rate than others, but this does not necessarily mean that everyone agrees that the test is fair and should be used. **Fairness** goes beyond legality and includes an assessment of potential bias or discrimination associated with a given selection method. Fairness concerns the probability that people will be able to perform satisfactorily in the job, even though the test predicted that they would not.

Fairness

A characteristic of selection methods that reflects individuals' perceptions concerning potential bias and discrimination in the selection methods.

From the applicants' perspective, selection procedures are seen as more fair if they believe they are given an opportunity to demonstrate their skills and qualifications.²² Because of this and other factors, assessments of fairness often depend a great deal on personal values. The very purpose of employee selection is to make decisions that discriminate against some people. Under optimal conditions, this discrimination is related only to differences in job performance. Yet no selection procedure has perfect validity. All techniques screen out some people who would actually perform well if given the opportunity. For example, some research has found that tests can unfairly screen out individuals who believe that people like them don't perform well on the specific test.²³ For instance, a woman may not perform well on a mathematics test if she believes that women aren't good at math. Simply seeing the test as biased can result in decreased motivation to try hard and thereby lower scores, even though these people have the skills necessary to do the job.

The number of people who are unfairly eliminated decreases as validity increases, meaning that more valid tests are usually more fair. Unfortunately, even tests with relatively high validity screen out a number of people who could perform the job. One concern is that the number of people improperly screened out may include a higher percentage of women and minorities. Thus, some employee selection procedures may provide economic value to organizations at the expense of individuals who are screened out even though they would perform well. This situation creates a tradeoff between a firm's desire to be profitable and society's desire to provide people from all subgroups with an equal chance to obtain quality employment. Perceptions of the proper balance between these values differ depending on personal values, making fairness a social rather than scientific concept.

ACCEPTABILITY

Acceptability

A characteristic of selection methods that reflects applicants' beliefs about the appropriateness of the selection methods.

A final principle for determining the merit of selection techniques is **acceptability**, which concerns how applicants perceive the technique. Can a selection method make people see the organization as a less desirable place to work? Think back to the football coaches. Suppose they came up with a test of mental toughness that subjected recruits to intense physical pain. Would completing the test make some recruits see the school less favorably? Would some potential players choose to go to other schools that did not require such a test?

This example shows that selection is a two-way process. As an organization is busy assessing people, those same people are making judgments about whether they really want to work for the organization. Applicants see selection methods as indicators of an organization's culture, which can influence not only their decisions to join the organization but also subsequent feelings of job satisfaction and commitment.²⁴ Organizations should thus be careful about the messages that their selection techniques are sending to applicants.

In general, applicants have negative reactions to assessment techniques when they believe that the organization does not need the information being gathered—that the information is not job related. For instance, applicants tend to believe that family and childhood experiences are private and unrelated to work performance. Applicants also tend to be skeptical when they believe that the information from a selection assessment cannot be evaluated correctly. In this sense, many applicants react negatively to handwriting analysis and psychological assessment because they do not believe these techniques yield information that can be accurately scored.²⁵

One interesting finding is that perceptions of fairness differ among countries. For instance, people in France see handwriting analysis and personality testing as more acceptable than do people in the United States. At the same time, people in the United States see interviews, résumés, and biographical data as more acceptable than do people in France.²⁶

There is also some evidence that applicants react more positively to a particular assessment when they believe they will do well on it. One study, for example, found people who use illegal drugs to be less favorable about drug testing.²⁷ Although this is hardly surprising, it does illustrate the complexity of understanding individual reactions to employee selection techniques.



CONCEPT CHECK

1. *What criteria are used to determine whether employee selection methods are good?*
2. *What are ways to assess selection method validity?*
3. *What influences the cost effectiveness of a selection method?*

LEARNING OBJECTIVE 3

What Selection Methods Are Commonly Used?

Methods for selecting employees include testing, gathering information, and interviewing. We discuss particular practices associated with each of these categories in the sections that follow.

TESTING

Employment testing provides a method for assessing individual characteristics that help some people be more effective employees than others. Tests provide a common set of questions or tasks to be completed by each job applicant. Different types of tests measure knowledge, skill, and ability, as well as other characteristics, such as personality traits.

Cognitive Ability Testing

Being smart is often measured through **cognitive ability testing**, which assesses learning, understanding, and ability to solve problems.²⁸ Cognitive ability tests are sometimes referred to as “intelligence” or “mental ability” tests. If you took the SAT or ACT test before applying to college, then you have taken a test similar to a cognitive ability test. Some measure ability in a number of specific areas, such as verbal reasoning and quantitative problem solving. However, research suggests that general mental ability, which is represented by a summation of the specific measures, is the best predictor of performance in work contexts.²⁹ Of course, cognitive ability is somewhat related to education, but actual test scores have been shown to predict job performance better than measures of educational attainment.³⁰

Cognitive ability testing

Assessment of a person’s capability to learn and solve problems.

Examples of items from a widely used cognitive ability test are shown in Table 6.2. How would you score on such a test? Cognitive ability tests have high reliability; people tend to score similarly at different times and on different test forms.³¹ In addition, these tests are difficult to fake, and people are generally unable to substantially improve their scores by simply taking courses that teach approaches to taking the test.³² Validity is higher for cognitive ability tests than for any other selection method.³³ This high validity, combined with relatively low cost, results in substantial utility. Cognitive ability tests are good, inexpensive predictors of job performance.

A particularly impressive feature of cognitive ability tests is their validity generalization. They predict performance across jobs and across cultures.³⁴ Everything else being equal, people with higher cognitive ability perform better regardless of the type of work they do.³⁵ Nevertheless, the benefits of high cognitive ability are greater for more complex jobs, such as computer programmer or physician.³⁶ One explanation of why these tests predict performance across jobs and organizations, especially when work is complex, is the link between cognitive ability and problem solving. People with higher cognitive ability obtain more knowledge.³⁷ Researchers have also posited that people with higher cognitive ability adapt to change more quickly, although the actual evidence supporting better adaptation is inconsistent.³⁸

Table 6.2

Wonderlic Personnel Test Sample Questions

- Which of the following is the earliest date?
A) Jan. 16, 1898 B) Feb. 21, 1889 C) Feb. 2, 1898 D) Jan. 7, 1898 E) Jan. 30, 1889
- LOW** is to **HIGH** as **EASY** is to ____?
J) **SUCCESSFUL** K) **PURE** L) **TALL** M) **INTERESTING** N) **DIFFICULT**
- What is the next number in the series? 29 41 53 65 77 ____?
J) 75 K) 88 L) 89 M) 98 N) 99
- One word below appears in color. What is OPPOSITE of that word?*
She gave a **complex** answer to the question and we all agreed with her.
A) long B) better C) simple D) wrong E) kind
- Jose's monthly parking fee for April was \$150; for May it was \$10 more than April; and for June \$40 more than May. His average monthly parking fee was ____? for these 3 months.
J) \$66 K) \$160 L) \$166 M) \$170 N) \$200
- If the first two statements are true, is the final statement true?*
Sandra is responsible for ordering all office supplies.
Notebooks are office supplies.
Sandra is responsible for ordering notebooks.
A) yes B) no C) uncertain
- Which THREE of the following words have similar meanings?
A) observable B) manifest C) hypothetical D) indefinite E) theoretical
- Last year, 12 out of 600 employees at a service organization were rewarded for their excellence in customer service, which was ____? of the employees.
J) 1% K) 2% L) 3% M) 4% N) 6%

Correct Answers: 1. E, 2. N, 3. L, 4. C, 5. M, 6. A, 7. CDE, 8. K

Source: Sample items for Wonderlic Personnel Test-Revised (WPT-R). Reprinted with permission from Wonderlic, Inc.

A concern about cognitive ability tests is that people from different racial groups tend to score differently.³⁹ This does not mean that every individual from a lower-scoring group will score low. Some individuals from each group will score better and some will score worse, but on average, some groups do worse than others. The result is adverse impact, wherein cognitive ability tests screen out a higher percentage of applicants from some minority groups. Because of their strong link with job performance, cognitive tests can be used legally in most settings. However, a frequent social consequence of using cognitive ability tests is the hiring of fewer minority workers.

In terms of acceptability, managers see cognitive ability as one of the most important predictors of work performance.⁴⁰ Human resource professionals and researchers strongly believe in the validity of cognitive ability tests, even though some express concern about the societal consequences of their use.⁴¹ In contrast, job applicants often perceive other selection methods as being more effective.⁴² Not surprisingly, negative beliefs about cognitive ability tests are stronger for people who do not perform well on the tests.⁴³

In summary, cognitive ability tests are a useful tool for determining whom to hire. As discussed in the “How Do We Know?” feature, these tests can predict long-term success. They predict potential more than achievement, making them best suited for organizations pursuing long-term staffing strategies. High cognitive ability is particularly important for success in organizations with long-term staffing strategies, as employees must learn and adapt during long careers. Using cognitive ability tests is thus beneficial for organizations seeking long-term generalists and specialists. Organizations seeking



How Do We Know?

IS IT BETTER TO BE SMART OR BEAUTIFUL?

Do smart people have a better chance of getting rich? How about people who are physically attractive? Are they more likely to be rich? Timothy Judge, Charlice Hurst, and Lauren Simon sought to answer these questions with a study of 191 randomly selected people between the ages of 25 and 74. Participants completed a cognitive ability measure. They also provided a photograph that was rated for physical attractiveness. Participants also reported on their level of education attainment and their core self-evaluations (levels of confidence, self-esteem, sense of internal control, and lack of anxiety). At a later time, participants also reported their income.

Results showed a positive effect on income for both intelligence and beauty. Smarter people had higher income, as did people who were rated higher on physical attractiveness. Smarter people attained more education and had more positive

perceptions about themselves, which in turn translated into higher income. The effect was similar for physical attractiveness. Better-looking people similarly attained more education and had more positive self-perceptions, which corresponded with increased income.

Bottom Line. Being either smart or good looking makes someone more likely to be rich. But if you had to choose one or the other, choose being smart, as the effect of being smart was twice as large as the effect of being beautiful. Nevertheless, the authors conclude that being beautiful does indeed provide people with a seemingly unfair advantage.

Source: Timothy A. Judge, Charlice Hurst, and Lauren S. Simon, “Does It Pay to Be Smart, Attractive, or Confident (or All Three)? Relationships Among General Mental Ability, Physical Attractiveness, Core Self-Evaluations, and Income,” *Journal of Applied Psychology* 94 (2009): 742–755.

Table 6.3 Summary of Personality Testing Research

	Average Correlation with Job Performance	Average Correlation with Job Satisfaction
Openness to Experience—High scorers are imaginative, idealistic, unconventional, not cautious, and inventive	.07	.02
Extraversion—High scorers are sociable, aggressive, not shy, enthusiastic, cheerful, and forceful	.15	.25
Emotional Stability—High scorers are not anxious, contented, confident, not moody, not irritable, and not fearful	.15	.29
Conscientiousness—High scorers are efficient, organized, goal-driven, ambitious, and thorough.	.24	.20
Agreeableness—High scorers are forgiving, trusting, friendly, not stubborn, warm, and sympathetic	.11	.17

Sources: Information from Timothy A. Judge, Daniel Heller, and Michael K. Mount, “Five-Factor Model of Personality and Job Satisfaction: A Meta-Analysis,” *Journal of Applied Psychology* 87 (2002): 530–541; Murray R. Barrick, Michael K. Mount, and Timothy A. Judge, “Personality and Performance at the Beginning of the Millennium,” *International Journal of Selection and Assessment* 9 (2001): 9–30.

short-term generalists can also benefit by using these tests to inexpensively assess basic math and language ability.

Personality Testing

Personality testing
Assessment of traits that show consistency in behavior.

Personality testing measures patterns of thought, emotion, and behavior.⁴⁴ Researchers have identified five broad dimensions of personality: agreeableness, conscientiousness, emotional stability, extraversion, and openness to experience.⁴⁵ A description of each dimension and a summary of its general relationship to job performance and job satisfaction are presented in Table 6.3.

For a number of years, researchers did not consider personality tests helpful for selecting employees.⁴⁶ However, research during the past 20 years has changed this judgment, and personality testing is now seen as a relatively effective method of selection. Furthermore, the five broad personality dimensions can be accurately measured in numerous languages and cultures, making the tests useful for global firms. Patterns of relationships with work performance are similar across national boundaries.⁴⁷ In fact, looking at Table 6.4 shows that personality testing is used more frequently in countries other than the United States.

Looking at personality tests in general, we find that measures for the five personality dimensions demonstrate adequate reliability.⁴⁸ Different forms and parts of the test correlate highly with each other. In particular, personality tests with items that specifically ask about characteristics in employment settings tend to yield consistent measures of behaviors that are important at work.⁴⁹

Relationships between personality dimensions and performance, which represent validity, differ depending on the personality dimension being measured. In general, personality dimensions associated with motivation are good predictors of performance. One such dimension is conscientiousness.

Conscientious employees are motivated—they set goals and work hard to accomplish tasks.⁵⁰ Conscientious people also tend to be absent from work less frequently.⁵¹ Conscientious workers are more satisfied with their jobs and are more likely to go beyond minimum expectations to make the organization successful.⁵² Conscientiousness thus exhibits validity generalization in that it predicts work performance regardless of the type of work. Research evidence suggests that emotional stability does not relate as strongly to performance as

Table 6.4

Use of Selection Methods Around the World

Values are based on average ratings with 5 = Always and 1 = Never; Higher scores represent more widespread use

Selection Method	Scores				
	United States	Portugal	France	Hong Kong	South Africa
Cognitive ability test	2.09	3.27	2.29	1.83	3.25
Personality test	1.62	3.00	3.42	2.50	3.66
Physical ability test	1.21	1.69	1.29	1.17	1.26
Integrity test	1.09	1.92	1.00	1.33	1.62
Drug test	2.21	1.93	1.18	1.17	1.58
Application form	4.12	3.40	4.09	4.75	4.20
Biodata	1.21	2.29	1.20	1.62	1.41
Work sample	1.40	1.69	1.50	1.83	1.71
Reference check	4.02	3.14	3.32	3.75	4.09
Individual interview	4.78	4.77	4.85	3.38	4.72
Panel interview	3.27	3.29	2.06	3.63	3.63
Handwriting analysis	1.09	1.00	3.26	1.00	1.45

Source: Information from Ann Marie Ryan, Lynn McFarland, Helen Baron, and Ron Page, "An International Look at Selection Practices: Nation and Culture as Explanations for Variability in Practice," *Personnel Psychology* 52 (1999): 359–391.

conscientiousness, yet, it too captures aspects of motivation and demonstrates validity generalization. People high on emotional stability are more confident in their capabilities, which in turn increases persistence and effort.⁵³ Yet, people who are highly anxious can actually perform better in some contexts such as air traffic controller that require workers to pay very close attention to detail in a busy environment.⁵⁴

Relationships with the other three personality dimensions depend on the work situation, meaning that these measures have situational specificity. Extraversion corresponds with a desire to get ahead and receive rewards, making it a useful predictor for performance in sales and leadership positions.⁵⁵ More extraverted employees who are also more emotionally stable, think happy and bubbly personalities, have also been found to excel in customer-service jobs such as those found in a health and fitness center. Agreeableness is important for interpersonal relationships and corresponds with high performance in teams and service jobs that require frequent interaction with customers.⁵⁶ Much of this effect occurs because agreeable employees are more likely to go beyond minimum expectations and help their coworkers.⁵⁷ Openness to experience is seldom related to work performance, but recent research suggests that it can increase performance in jobs that require creativity and adaptation to change.⁵⁸ One setting requiring adaptation is working in a foreign country, and people more open to experience do indeed perform better in such assignments.⁵⁹ People who are more open to experience are also more likely to be entrepreneurs.⁶⁰

A notable feature of personality tests is their helpfulness in predicting the performance of entire teams. Teams that include just one person who is low on agreeableness or conscientiousness have lower performance.⁶¹ This means that personality tests predict not only individual performance but also how an individual's characteristics will influence the performance of other people. This feature increases the utility of personality testing, because hiring

someone with desirable traits yields benefits related not just to the performance of that individual but also to the performance of others.

A few states have laws that prohibit personality testing. However, in most cases, the use of personality tests does not present problems as long as organizations use well-developed tests that do not ask outwardly discriminatory questions.⁶² Personality tests do have some adverse impact for women and minorities. For minorities the negative effect is less than that for cognitive ability tests.⁶³

With regard to acceptability, a common concern about the use of personality tests is the potential for people to fake their responses. Indeed, research has shown that people are capable of faking and obtaining higher scores when instructed to do so. Moreover, people do inflate their scores when they are being evaluated for selection.⁶⁴ Although faking does have the potential to make personality tests less valid predictors of job performance,⁶⁵ the overall relationship between personality measures and job performance remains,⁶⁶ meaning that even with faking, personality tests can be valid selection measures. Using statistical procedures to try correcting for faking does little to improve the validity of tests.⁶⁷ However, faking does involve issues of fairness. Some people fake more than others, and people who do not inflate their scores may be unfairly eliminated from jobs.⁶⁸ Faking can thus lead to decisions that are unfair for some individuals, even though it has little negative consequence for the organization. To reduce the potentially negative impact on individuals, organizations can use personality tests in early stages of the selection process to screen out low scorers rather than in later stages to make final decisions about a few individuals.⁶⁹

Another method for reducing faking is to create personality tests with items that have less obvious answers. An example of this approach is a Conditional Reasoning Test. Conditional Reasoning Tests are designed to assess unconscious biases and motives. With this approach job applicants are asked to solve reasoning problems that do not have answers that are obviously right or wrong. People with certain tendencies base their decisions on particular forms of reasoning.⁷⁰ For example, a person prone to aggression is more likely to attribute actions of others as hostile. What appears to be the most reasonable answer to the aggressive person (that other people do things because they are mean) is different than what less aggressive people see as the most reasonable answer. Because they tap into unconscious beliefs, these tests are more difficult to fake.⁷¹ Unfortunately, Conditional Reasoning Tests are somewhat difficult to create and as of yet do not measure the full array of personality traits.

Personality testing, then, is another generally effective tool for determining whom to hire. These tests are increasingly available on the Internet, as explained in the accompanying “Technology in HR” feature. This makes personality tests relatively simple to administer. Yet, personality tests often relate more to organization fit than to job fit, suggesting that personality measures are most appropriate in organizations that adopt long-term staffing strategies. People with personality traits that fit an organization’s culture and work demands are more likely to remain with the organization.⁷² Personality testing is thus especially beneficial for organizations adopting Committed Expert and Loyal Soldier HR Strategies.

Situational judgment test

Assessment that asks job applicants what they would do, or should do, in a hypothetical situation.

Situational Judgment Tests

Situational judgment tests are a relatively new development. These tests place job applicants in a hypothetical situation and then ask them to choose the most appropriate response. Items can be written to assess job knowledge,



Technology in HR

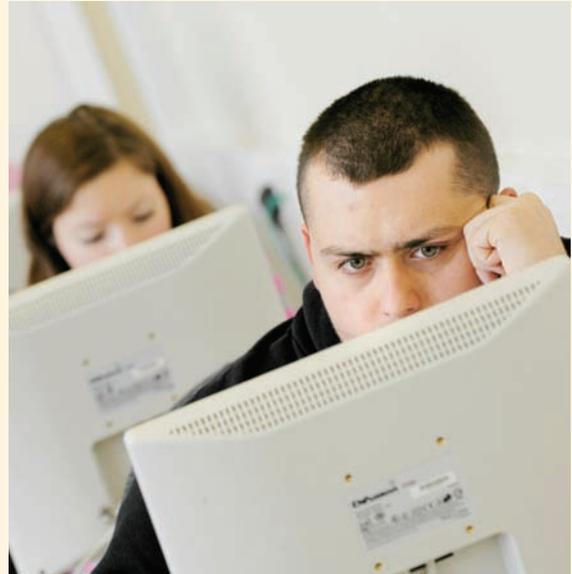
ADMINISTERING TESTS ON THE INTERNET

Widespread access to computers and the Internet provides a potentially improved method for administering employment tests. Using the Internet, people can take tests whenever and wherever they want. Testing can also be individualized so that responses to early questions are used to choose additional questions. Perhaps more important, scoring can be done quickly and accurately. These potential benefits are accompanied by a number of concerns, however.

One source of concern is test security. If someone takes a test at home, can the organization be sure that the test was actually completed by the applicant? Are scores from a computer version of a test equivalent to scores from a paper-and-pencil version of the test? Do people fake their scores more when using a computer? Will people from racial subgroups score higher or lower on a computerized test?

Given the potential benefits of computer-administered tests, researchers have conducted a great deal of research in this area. One large study compared responses from 2,544 people completing a paper-and-pencil version of a personality and biographical data test with responses from 2,356 people completing the same test in a Web-based format. The computer test had higher reliability and less evidence of faking. Other studies have generally concluded that computer-administered tests are just as reliable and valid as traditional tests. In addition, in many instances, computer-based tests have less adverse impact and are seen as more fair by applicants from minority groups. Overall, the results suggest that increased use of technology can result in improved employment testing.

Sources: Information from Robert E. Ployhart, Jeff A. Weekley, Brian C. Holtz, and Cary Kemp, "Web-Based and Paper and Pencil Testing of Applicants in a Proctored Setting: Are Personality, Biodata, and Situational Judgment Tests Comparable?" *Personnel*



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general cognitive ability, or practical savvy. Situational judgment tests also tend to capture broad personality traits such as conscientiousness and agreeableness, as well as tendencies toward certain behavior (like taking initiative) in more specific situations.⁷³

Some situational judgment tests use a knowledge format that asks respondents to pick the answer that is most correct. Other tests use a behavioral tendency format that asks respondents to report what they would actually do in the situation. Although the questions are framed a bit differently, the end result seems to be the same.⁷⁴ Situational judgment tests have been found to have good reliability and validity. They predict job performance in most jobs, and they provide information that goes beyond cognitive ability and personality tests.⁷⁵ Situational judgment tests thus appear to represent an extension of other tests. They closely parallel structured interviews, which we will discuss shortly. Questions can be framed to measure either potential in organizations with long-term orientations or achievement and knowledge in organizations with short-term labor strategies. They can also be designed to emphasize either general traits or specific skills. This makes them useful for organizations pursuing any of the human resource strategies.

Physical Ability Testing

Physical ability testing assesses muscular strength, cardiovascular endurance, and coordination.⁷⁶ These tests are useful for predicting performance in many manual labor positions and in jobs that require physical strength. Physical ability tests can be particularly important in relation to the Americans with Disabilities Act, as organizations can be held liable for discrimination against disabled applicants. Managers making selection decisions should thus test individuals with physical disabilities and not automatically assume that they cannot do the job.

Physical ability tests have high reliability; people score similarly when the same test is given at different times. Validity and utility are also high for positions that require physical inputs, such as police officer, firefighter, utility repair operator, and construction worker.⁷⁷ Validity generalization is supported for positions where job analysis has shown work requirements to be physically demanding.⁷⁸

As long as job analysis has identified the need for physical inputs, physical ability testing presents few legal problems. However, men and women do score very differently on physical ability tests. Women score higher on tests of coordination and dexterity, whereas men score higher on tests of muscular strength.⁷⁹ Physical ability tests thus demonstrate adverse impact. In particular, selection decisions based on physical ability tests often result in exclusion of women from jobs that require heavy lifting and carrying.

The usefulness of physical ability testing is not limited to a particular HR strategy. Physical tests can be useful for organizations seeking any form of talent, as long as the talent relates to physical dimensions of work.

Integrity Testing

In the past, some employers used polygraph—or lie detector—tests to screen out job applicants who might steal from them. However, the Employee Polygraph Protection Act of 1988 generally made it illegal to use polygraph tests for hiring decisions. Since then, organizations have increasingly turned to paper-and-pencil tests for **integrity testing**. Such tests are designed to assess the likelihood that applicants will be dishonest or engage in illegal activity.

There are two types of integrity test: overt and covert. Overt tests ask questions about attitudes toward theft and other illegal activities. Covert tests are more personality-based and seek to predict dishonesty by assessing attitudes and tendencies toward antisocial behaviors such as violence and substance abuse.⁸⁰

Integrity testing

Assessment of the likelihood that an individual will be dishonest.

Research evidence generally supports the reliability and validity of integrity tests. These tests predict not only counterproductive behavior but also absenteeism and overall performance.⁸¹ Most often, such tests are used in contexts that involve the handling of money, such as banking and retail sales.

In many ways, integrity tests are similar to personality tests. In fact, strong correlations exist between integrity test scores and personality test scores, particularly for conscientiousness.⁸² As with personality tests, a concern is that people may fake their responses when jobs are on the line. The evidence suggests that people can and do respond differently when they know they are being evaluated for a job. Even so, links remain between test scores and subsequent measures of ethical behavior.⁸³ Furthermore, integrity tests show no adverse impact for minorities⁸⁴ and appear to predict performance consistently across national cultures.⁸⁵

Integrity tests can be useful for organizations with Bargain Labor HR strategies. These firms hire many entry-level workers to fill positions in which they handle substantial amounts of money. In such cases, integrity tests can provide a relatively inexpensive method for screening applicants. This explains why organizations like grocery stores, fast-food chains, and convenience stores make extensive use of integrity testing to select cashiers.⁸⁶

Drug Testing

Drug testing normally requires applicants to provide a urine sample that is tested for illegal substances. It is quite common in the United States, perhaps because, according to some estimates as much as 14 percent of the workforce uses illegal drugs, with as many as 3 percent of workers actually using drugs while at work.⁸⁷ Illegal drug use has been linked to absenteeism, accidents, and likelihood of quitting.⁸⁸ Drug testing, which is both reliable and valid, appears to be a useful selection method for decreasing such nonproductive activities. Even though administration costs can be high, basic tests are modestly priced, supporting at least moderate utility for drug testing.

Most research related to drug testing has looked at how people react to being tested. In general, people see drug testing as most appropriate for safety-sensitive jobs such as pilot, heart surgeon, and truck driver.⁸⁹ Not surprisingly, people who use illicit drugs are more likely to think negatively about drug testing.⁹⁰

Drug testing can be useful for firms that hire most types of talent. Organizations seeking short-term generalists use drug testing in much the same way as integrity testing. Organizations with long-term employees frequently do work that requires safe operational procedures. In these organizations, drug testing is useful in selecting people for positions such as forklift operator, truck driver, and medical care provider.

Work Sample Testing

As shown in the “Building Strength Through HR” feature, certain jobs require specific skills. One way of assessing specific skills is **work sample testing**, which directly measures performance on some element of the job. Common examples include typing tests, computer programming tests, driving simulator tests, and electronics repair tests. In most cases, these tests have excellent reliability and validity.⁹¹ Many work sample tests are relatively inexpensive as well, which translates into high utility. Because they measure actual on-the-job activities, work sample tests also involve few legal problems. However, in some cases work test scores are lower for members of minority groups.⁹²

Work sample testing

Assessment of performance on tasks that represent specific job actions.

Assessment center

A complex selection method that includes multiple measures obtained from multiple applicants across multiple days.

A problem with work sample tests is that not all jobs lend themselves to this sort of testing. What type of work sample test would you use for a medical doctor or an attorney, for example? The complexity of these jobs makes the creation of work sample tests very difficult. However, human resource specialists have spent a great deal of time and effort developing a work sample test for the complex job of manager. The common label for this tool is **assessment center**.



Building Strength Through HR

SERVICE PROVIDERS

In many cases, the goods produced and sold by an organization are similar to those sold and produced by competitors. For these organizations, providing good customer service is a key to developing competitive advantage. The key to good customer service is identifying and hiring employees who have pleasant personalities and work well with customers. Many service providers also struggle with finding employees who are likely to remain employed for long periods of time. The critical nature of hiring people with desirable traits has led many service providers to create excellent employee selection practices.

One service provider with a well-developed selection strategy is Outsourcing Solutions, Inc., a company that provides debt-collection services. Outsourcing Solutions employs 80,000 people and builds competitive strength by using a customized pre-employment test to measure service skills. Job applicants take the test even before they speak to a recruiter. Results from the test eliminate about 15 percent of the applicants from further consideration. Use of the test has helped Outsourcing Solutions reduce the number of employees who quit or are fired. The estimated financial benefit is approximately \$1 million per year.

Another service provider that gains competitive advantage through employee selection is Spectrum Stores, Inc., a company that owns a number of convenience stores and employs 1,000 people. Spectrum uses an honesty test and an assessment of customer service skills to help select store clerks. Job applicants complete the test when they fill out an application. Test results eliminate 35 to 40 percent of applicants. Employee turnover at Spectrum is less than half that of other convenience store chains. Theft by employees is also less than half



that of other chains, which saves Spectrum as much as \$3 million each year.

American Residential Services is a heating, plumbing, and electrical company that also uses testing to identify and select its 7,000 customer service personnel. Applicants for service technician jobs take an assessment test to measure their customer service skills and likelihood of staying with the firm. Test results eliminate between 10 and 15 percent of applicants. Turnover has dropped since American Residential started using the test, and the company now hires about 100 fewer technicians each month, resulting in savings of about \$7 million a year.

Human resource management practices at these three service providers build competitive strength by using tests to screen out people who are unlikely to succeed in specific jobs. The tests also help identify people who are likely to remain with the organization. Incorporating tests as part of the employee selection process has helped each of these firms decrease labor costs and increase productivity.

Source: Information from Sarah F. Gale, "Putting Job Candidates to the Test," *Workforce* 82, no. 2 (2003): 6464–6468.

Assessment center participants spend a number of days with other managerial candidates. Several raters observe and evaluate the participants' behavior across a variety of exercises. In one typical assessment center exercise, for example, managerial candidates work together in a group to solve a problem in the absence of a formal leader. For the in-basket exercise, participants write a number of letters and memos that simulate managerial decision making and communication. Managers and recruiters from the organization serve as observers who rate the participants in areas such as consideration and awareness of others, communication, motivation, ability to influence others, organization and planning, and problem solving.⁹³

Assessment centers have good reliability and validity, which suggests that they can be excellent selection tools in many contexts.⁹⁴ Validity improves when assessment center evaluators are trained and when exercises are specifically tailored to fit the job activities of the participants.⁹⁵ Minority racial groups have been found to score lower in assessment centers, but women often score higher.⁹⁶ Creating and operating an assessment center can be very expensive, which substantially decreases utility for many organizations. Because of their high cost, assessment centers are normally found only in very large organizations.

Assessment centers are most common in organizations with long-term staffing strategies, particularly those adopting Committed Expert HR strategies. Proper placement of individuals is extremely critical for these organizations, and the value of selecting someone for a long career offsets the high initial cost of assessment. Other types of work sample tests are useful for organizations pursuing any of the staffing strategies. A typing test can be a valuable aid for hiring a temporary employee who works as a short-term generalist, for example. Similarly, a computer programming test can be helpful when hiring someone to work as a short-term specialist.

INFORMATION GATHERING

In addition to tests, organizations use a variety of methods to directly gather information about the work experiences and qualifications of potential employees. Common methods for gathering information include application forms and résumés, biographical data, and reference checking.

Application Forms and Résumés

Many entry-level jobs require potential employees to complete an application form. Application forms ask for information such as address and phone number, education, work experience, and special training. For professional-level jobs, similar information is generally presented in résumés. The reliability and validity of these selection methods depends a great deal on the information being collected and evaluated. Measures of things such as work experience and education have at least moderately strong relationships with job performance.⁹⁷

With regard to education, the evidence shows that what you do in college really does matter. Employees with more education are absent less, show more creativity, and demonstrate higher task performance.⁹⁸ People who complete higher levels of education and participate in extracurricular activities are more effective managers. Those who study humanities and social sciences tend to have better interpersonal and leadership skills than engineers and science majors.⁹⁹ Grades received, particularly in a major, also have a moderate

relationship with job performance. Managers do not always use grades for making selection decisions, however.¹⁰⁰

Application forms and résumés also provide valuable information about work experience. People with more work experience have usually held more different positions, been in those positions for longer periods, and more often done important tasks.¹⁰¹ Because they have been exposed to many different tasks, and because they have learned by doing, people with greater experience are more valuable contributors. In addition, success in previous jobs demonstrates high motivation.¹⁰² Work experience thus correlates positively with performance, particularly when performance is determined by output measures such as production or amount of sales.¹⁰³

One special advantage of application forms and résumés is their utility. Because these measures are generally inexpensive, they are frequently used as early screening devices. In terms of legality and fairness, measures of education and experience do have some adverse impact.¹⁰⁴ Information being obtained from application forms and résumés should therefore be related to job performance to ensure validity.

Application forms and résumés can provide important information about past achievements, which makes them most valuable for organizations seeking short-term employees. However, these selection tools can also capture potential and fit, so many organizations seeking long-term employees find them useful as well. Application forms are used mostly in organizations hiring generalists. They provide good measures of work experience and education that help identify people who have been dependable in jobs and school. Résumés are more commonly used in organizations that hire specialists. In particular, résumés provide information about experience and education relevant to a particular position.

Biographical Data

Biographical data

Assessment focusing on previous events and experiences in an applicant's life.

Organizations also collect **biographical data**, or biodata, about applicants. Collecting biodata involves asking questions about historical events that have shaped a person's behavior and identity.¹⁰⁵ Some questions seek information about early life experiences that are assumed to affect personality and values. Other questions focus on an individual's prior achievements based on the idea that past behavior is the best predictor of future behavior. Common categories for biographical questions include family relationships, childhood interests, school performance, club memberships, and time spent in various leisure activities. Specific questions might include the following:

- How much time did you spend with your father when you were a teenager?
- What activities did you most enjoy when you were growing up?
- How many jobs have you held in the past five years?

Job recruiters frequently see these measures as indicators of not only physical and mental ability but also interpersonal skill and leadership.¹⁰⁶ The information provided by biodata measures does not duplicate information from other measures, such as personality measures, however.¹⁰⁷

Biodata measures have been around for a long time, and they are generally useful for selecting employees. Scoring keys can be developed so that biodata responses can be scored objectively, just like a test. Objective scoring methods improve the reliability and validity of biodata. With such procedures, biodata has adequate reliability.¹⁰⁸ Validity is also good, as studies show relatively strong relationships with job performance and employee

turnover.¹⁰⁹ In particular, biodata measures appear to have high validity for predicting sales performance.¹¹⁰ One common concern has been the validity generalizability of biodata. Questions that link with performance in one setting may not be useful in other settings. However, some recent research suggests that carefully constructed biographical measures can predict performance across work settings.¹¹¹ Identifying measures that predict work performance across settings can help overcome a weakness of biodata, which is the high initial cost of creating measures. Finding items that separate high and low performers can take substantial time and effort, making items that predict performance across settings highly desirable.

Some human resource specialists express concern about legality and fairness issues with biodata. Much of the information collected involves things beyond the control of the person being evaluated for the job and is likely to have adverse impact for some. For instance, children from less wealthy homes may not have had as many opportunities to read books. Applicants' responses may also be difficult to verify, making it likely that they will fake. Using questions that are objective, verifiable, and job-related can minimize these concerns.¹¹²

Biodata measures can benefit organizations whatever their staffing strategies. Organizations seeking long-term employees want to measure applicants' potential and should therefore use biodata measures that assess core traits and values. In contrast, organizations seeking short-term employees want to measure achievement and can benefit most from measures that assess verifiable achievements.

Reference Checking

Reference checking involves contacting an applicant's previous employers, teachers, or friends to learn more about the applicant. Reference checking is one of the most common selection methods, but available information suggests that it is not generally a valid selection method.¹¹³

The primary reason reference checking may not be valid relates to a legal issue. Organizations can be held accountable for what they say about current or past employees. A bad reference can become the basis for a lawsuit claiming **defamation of character**, which occurs when something untrue and harmful is said about someone. Many organizations thus adopt policies that prevent managers and human resource specialists from providing more than dates of employment and position. Such information is, of course, of little value. Even when organizations allow managers to give more information, the applicant has normally provided the names only of people who will give positive recommendations.

Nevertheless, a second legal issue makes reference checks critical in certain situations. This issue is **negligent hiring**, which can occur when an organization hires someone who harms another person and the organization could reasonably have determined that the employee was unfit.¹¹⁴ For instance, suppose an organization has hired someone to be a daycare provider. Further suppose that the organization did not conduct a thorough background investigation and that, if it had investigated, it could easily have discovered that the person had been convicted of child abuse. If this person abuses children in the employment setting, the organization can be held liable.

The competing legal issues of defamation of character and negligent hiring make reference checking particularly troublesome. On the one hand, most organizations are not willing to risk providing reference information.

Defamation of character

Information that causes injury to another's reputation or character; can arise as a legal issue when an organization provides negative information about a current or former employee.

Negligent hiring

A legal issue that can arise when an organization does not thoroughly evaluate the background of an applicant who is hired and then harms someone.

On the other hand, safety concerns make a background check mandatory for many jobs, such as daycare provider, transportation worker, and security guard. One result has been the growth of professional firms that use public information sources, such as criminal records and motor vehicle registrations, to learn about an applicant's history. Such investigations should be conducted only after initial screening tools have been used and only if the applicant signs an authorization release.

INTERVIEWING

The most frequently used selection method is interviewing, which occurs when applicants respond to questions posed by a manager or some other organizational representative. Most interviews incorporate conversation between the interviewer and the applicant. The interview is useful not only for evaluating applicants but also for providing information to applicants and selling the organization as a desirable place to work.

Assessing Interview Effectiveness

Depending on the questions, an interview can be used to measure a variety of characteristics. Typical areas include knowledge of job procedures, mental ability, personality, communication ability, and social skills. The interview also provides an effective format for obtaining information about background credentials, such as education and experience.¹¹⁵ People who are more conscientious and extraverted tend to do better in interviews, partly because they tend to spend more time learning about the company and position before the interview actually occurs.¹¹⁶ Applicants who present themselves well and build rapport with the interviewer also excel in interviews.¹¹⁷ As described in the “How Do We Know?” feature, even how someone shakes hands can make a difference. Although the research is somewhat mixed, it appears that applicants who receive training in how to act in interviews do indeed perform better.¹¹⁸ One concern about the interview is that candidates seek to impress interviewers, which means that the interviewer is not seeing and evaluating the true person. Evidence does indeed show that job applicants seek to manage impressions in job interviews, and that people who excel at making a good impression are not necessarily higher performers.¹¹⁹

Although researchers have historically argued that the interview is not a reliable and valid selection method, managers have continued to use this method. Recent research suggests that the conclusions of early studies were overly pessimistic and that managers are right in believing that the interview is a useful tool.

The reliability of interviews depends on the type of interview being conducted. We discuss some particularly reliable types of interviews shortly. For these types, reliability can be as high as for other measures, such as personality testing and assessment centers.¹²⁰ The overall validity of the interview is in the moderate range. However, again, validity varies for different types of interviews, with some types showing validity that is as high as that for any selection method.¹²¹ The interview also provides unique information that cannot be obtained through other methods.¹²²

The interview is also valuable in determining whether people “fit” with the job, workgroup, or organization. Interviewers often assess the likelihood that applicants will excel in the particular organization. These judgments are not based on typical qualifications, such as knowledge and experience, but



How Do We Know?

DOES IT MATTER HOW YOU SHAKE HANDS IN AN INTERVIEW?

Can a good handshake really help you get a job? A search of the Internet yields over a million sites that provide information about the proper way to shake hands in an employment interview. Yet, little scientific research has been done to determine if the handshake really matters. So Greg Stewart, Susan Dustin, Murray Barrick, and Todd Darnold designed a study to learn more about the handshake. Students who were seeking jobs participated in practice interviews. During the interview process six different people secretly evaluated each student's handshake. Neither the students nor the interviewers were aware that handshakes were being evaluated. Students shook hands with interviewers before a 30-minute interview. At the end of the interview, interviewers provided ratings of how likely they were to hire students. Ratings of the handshake were then correlated with final interview ratings to determine if the handshake was related to assessments of hirability.

Results showed that people with a better handshake (firm and complete grip, eye contact) were indeed more likely to receive job offers. Women were found to have less firm handshakes than men. However, women with a good handshake got more benefit out of it than did men with a firm handshake. Women may therefore not be as good as men at shaking hands, but those who do it well get extra credit from interviewers.

The Bottom Line. Little things like having a good handshake can indeed make a difference in an interview setting. Job candidates can benefit from a good handshake, which includes a complete grip of the hand, a firm grasp, moderate up-and-down movement, comfortable duration, and eye contact.

Source: Greg L. Stewart, Susan L. Dustin, Murray R. Barrick, Todd C. Darnold, "Exploring the Handshake in Employment Interviews," *Journal of Applied Psychology* 93 (2008): 1139–1146.

rather on characteristics such as goals, interpersonal skills, and even physical attractiveness.¹²³

One concern about the interview is its expense: The time managers spend conducting interviews can be costly. The interview thus has relatively low utility, and generally, only applicants who have been screened with less expensive selection methods should be interviewed. Another potential concern is discrimination. Interviewers make a number of subjective judgments, bringing up questions of possible bias. Indeed, research does suggest that interviewers can be biased in their judgments.¹²⁴ Yet, the general conclusion is that bias is relatively low as long as the structuring techniques described below are used.¹²⁵ Of course, interviewers must be careful not to ask questions that violate the laws discussed in Chapter 3. In particular, interviewers should avoid questions about family and marital relationships, age, disability, and religion.

Using Structured Interviews

We have seen that reliability and validity vary with the type of interview conducted. What makes some interviews better than others? The biggest difference between types of interviews concerns the amount of structure. The typical interview is an unstructured interview in which a single rater asks a series of questions and then provides an overall recommendation on whether the person interviewed should be hired. The questions asked usually vary from interviewer to interviewer, and interviewers can base their evaluations on anything that they think is important. Managers tend to prefer this type of interview. Research

Structured interview

Employment interview that incorporates multiple raters, common questions, and standardized evaluation procedures.

Situational interview

Type of structured interview that uses questions based on hypothetical situations.

Behavioral interview

Type of structured interview that uses questions concerning behavior in past situations.

has traditionally suggested that the reliability and validity of unstructured interviews can be quite low.¹²⁶ According to some newly emerging research, however, the unstructured interview can be a reliable tool when several people conduct interviews and then combine their individual evaluations.¹²⁷

A different type of interview, generally seen as superior, is the **structured interview**, which uses a list of predetermined questions based on knowledge and skills identified as being critical for success. This ensures that the questions are appropriate and that all applicants are asked the same questions. The structured interview is conducted by a panel of interviewers rather than by a single person. Members of the rating panel use formal scoring procedures that require them to provide numerical scores for a number of predetermined categories. The basic goal of the structured interview is to make sure that everyone who is interviewed is treated the same. This consistency across interviews improves reliability, which in turn improves validity. More structured interviews are also more effective in reducing the biasing effect of applicant impression management.¹²⁸ A method for creating structured interview questions and responses is outlined in Figure 6.4.

Most structured interviews fit into two types: (1) the **situational interview**, in which the interviewer asks questions about what the applicant would do in a hypothetical situation; and (2) the **behavioral interview**, in which the questions focus on the applicant's behavior in past situations. Researchers disagree about which type is best, with some research supporting each type.¹²⁹ In general, both types seek to have people discuss actions in a specific context and thus tend to generate responses that are good predictors of job performance. Examples of both types of interview questions are shown in Table 6.5. The table also shows scoring for sample responses; one reason these interview formats work is that they provide raters with clear examples for determining how a response should be scored.

Linking Interviews to Strategy

Interviews are used by organizations with all of the HR strategies. The focus of the interview questions, however, depends on strategy. Organizations seeking Free Agents focus on assessing achievement. Typical questions relate to job experience and certification in specific skills. In contrast, organizations

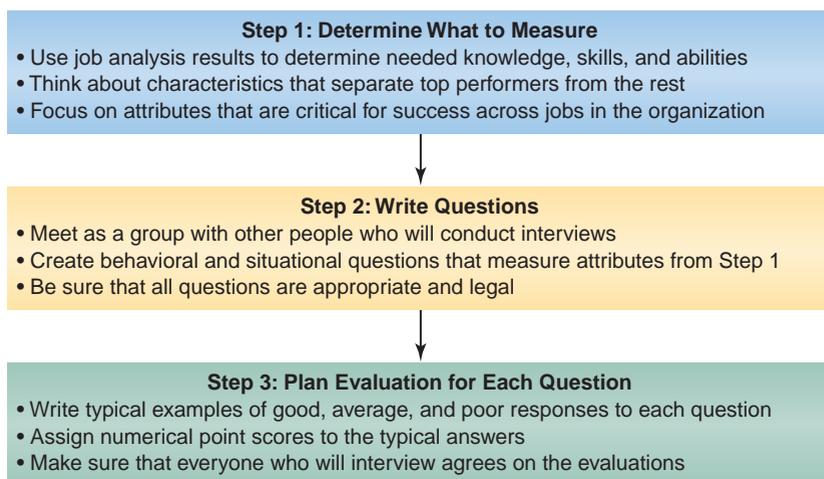


Figure 6.4 Creating Structured Interview Questions.

Table 6.5 *Types of Employment Interview Question*

	Format	Example Question	Possible Response
Behavioral Questions	Ask the applicant to describe actions in a particular past situation.	It is often necessary to work together in a group to accomplish a task. Please tell me about the most recent experience you had working as part of a group.	<i>Poor Response:</i> Lots of conflict. The other members were ineffective. <i>Average Response:</i> I did all the work myself. <i>Superior Response:</i> We worked together. I helped involve everyone.
Situational Questions	Put the applicant in a particular situation and then ask for a description of behavior.	A customer comes into a store where you work to pick up a watch he left for repair. The repair was supposed to have been completed a week ago, but the watch is not yet back from the repair shop. The customer is very angry. How would you handle this situation?	<i>Poor Response:</i> Tell him he should check back later. <i>Average Response:</i> Apologize and tell him I will call him later. <i>Superior Response:</i> Listen, put him at ease, call the repair shop while he waits.

seeking Loyal Soldiers focus on assessing fit. Specific questions measure personality characteristics, motivation, and social skills. Organizations seeking Committed Experts use a combination approach that assesses both potential and fit. Typical questions measure problem-solving ability and aptitude in a particular field, such as sales or engineering.

Effective organizations thus begin the interview process by thinking carefully about their HR strategy. After clearly determining their strategy, they begin to develop questions that help them identify individuals with the characteristics they most desire. Using the interview to properly identify and hire employees who are most likely to engage in the behaviors that facilitate either a low cost or differentiation strategy is thus a very effective method for using human resource management to create competitive advantage. Having the right employees develops an organizational culture that helps organizations meet the needs of customers.



CONCEPT CHECK

1. What are common methods of testing?
2. What information can be obtained from application blanks and résumés?
3. How can the reliability and validity of employment interviews be improved?

LEARNING OBJECTIVE 4

How Are Final Selection Decisions Made?

What happens after an organization tests, interviews, and gathers information about job applicants? In most cases, the organization ends up with several different scores from several different methods. How should it combine these bits of information to arrive at a final hiring decision?

One possibility is that decision makers will simply look at the scores from each method and then make a judgment about who should be hired. This is what frequently happens, but it does not usually lead to the best decision.¹³⁰ A better method is to use a set of decision rules and statistical tactics. Here, decision makers first obtain a numerical score for the outcome of each selection method and then apply decision strategies to the numerical scores. Common decision strategies include weighting the predictors, using minimum cutoffs, establishing multiple hurdles, and banding.¹³¹

PREDICTOR WEIGHTING APPROACH

Predictor weighting

Multiplying scores on selection assessments by different values to give more important means greater weight.

In **predictor weighting**, we combine a set of selection scores into an overall score in which some measures count more than others. For instance, suppose a manager has three applicants for an engineering position. Each candidate has a cognitive ability score, an interview score, and a biographical test score. One applicant has a high cognitive ability score and a low interview score; the second applicant has a low cognitive ability score and a high biographical test score; and the third applicant has an average score on all three tests. How can the manager use these scores to predict which applicant will perform best?

One approach is to take a simple average of all three test scores, but this procedure ignores the fact that one type of test might provide better information than another. The alternative is to establish a weight for each test, so that the method that provides the most valuable information has a higher influence on the overall decision. For instance, the cognitive ability test and interview might both be weighted as 40 percent of the overall score, with the biodata being weighted as 20 percent. Each score is multiplied by its assigned weight, and final selection decisions are based on an overall score.

How should the weights be determined? Experts who have a thorough knowledge of what it takes to succeed in the job might set the weights. However, an even better method is to use statistical methods for determining the best set of weights. Regardless how the weights are determined, the process of predictor weighting is helpful for ensuring that managers and human resource specialists give appropriate attention to the information obtained from each selection method.

MINIMUM CUTOFFS APPROACH

Predictor weighting allows an applicant's strength in one area to compensate for weakness in another area. Someone with a low cognitive ability score might still be hired if interview and biodata scores are high, for example. This makes sense in many contexts but not in every case. For instance, consider an organization that is hiring people to work in self-managing teams. These teams succeed only if team members are able to cooperate and work together. Suppose an applicant for a position on the team has a high cognitive ability score but a very low score on an interview measuring interpersonal skills. In the team setting, high cognitive ability will not make up for problems created by low interpersonal skills, and the organization will need to take this fact into consideration.

In such a situation, the organization can take a **minimum cutoffs approach**, requiring each applicant to have at least a minimum score on each selection method. An applicant who is very weak on any of the measures will not be hired.

Minimum cutoffs approach

The process of eliminating applicants who do not achieve an acceptable score on each selection assessment.

In practice, many organizations use minimum cutoffs to identify a pool of people who meet at least minimum requirements in a number of areas. Once this pool of people is identified, then weighted predictors are used to make the final hiring decision.

MULTIPLE HURDLES APPROACH

As we have seen, some selection methods are much more expensive than others. Using minimum cutoffs in a number of areas in progressive order can thus increase the utility of the overall selection process. A relatively inexpensive test, such as a cognitive ability test, is given first. Those who achieve at least the minimum score then go on to the next selection method. This second method might be more expensive, such as an interview. The **multiple hurdles approach** thus involves multiple cutoffs applied in order, and applicants must meet the minimum requirement of one selection method before they can proceed to the next. One advantage of the multiple hurdles approach is that fewer minority candidates may be eliminated because they meet the acceptable criteria even if they are not the highest scorer on a particular test.¹³² A potential problem with this approach is that decision makers eliminate applicants without knowing how they would score on all the tests. The process makes sense, though, when organizations use expensive selection tests and wish to limit the number of applicants who take those tests.

Multiple hurdles approach

The process of obtaining scores on a selection method and only allowing those who achieve a minimum score to take the next assessment.

BANDING APPROACH

Because few employment tests are totally reliable, two people with slightly different scores may not really differ on the characteristic being measured. The difference in the scores is caused by poor measurement. This possibility has led some experts to create a process called banding. The **banding approach** uses statistical analysis to identify scores that may not be meaningfully different. People with such scores are placed in a common category, or band, and managers and selection specialists are then free to choose any one of the applicants within the band.¹³³

Banding approach

The process of treating people as doing equally well when they have similar scores on a selection assessment.

The practice of banding is somewhat controversial. Some people argue that banding can help organizations meet affirmative action goals. If the band of applicants includes a member of a minority group, this person can be hired even if someone else had a slightly higher score. Others, however, argue that banding can lead to decreased utility because people with lower scores, and thus lower potential to succeed, are often hired.¹³⁴



CONCEPT CHECK

1. How can scores from different selection measures be combined to make a final hiring decision?
2. How is the multiple hurdles method different from the minimum cutoffs method?

A MANAGER'S PERSPECTIVE REVISITED

IN THE MANAGER'S PERSPECTIVE AT THE BEGINNING OF THE CHAPTER, JAVIER WAS RESPONSIBLE FOR HIRING A NEW MEMBER OF HIS CUSTOMER SERVICE TEAM. HE FACED A NUMBER OF ISSUES CONCERNING WHAT KIND OF PERSON TO HIRE, WHAT SELECTION METHODS TO USE, AND HOW TO MAKE HIS FINAL DECISION. FOLLOWING ARE THE ANSWERS TO THE "WHAT DO YOU THINK?" QUIZ THAT FOLLOWED THE CASE. WERE YOU ABLE TO CORRECTLY IDENTIFY THE TRUE STATEMENTS? COULD YOU DO BETTER NOW?

1. You should hire people who already have the skills and knowledge they will need on the job. **FALSE.** *Although organizations using short-term employment strategies may prefer to hire employees who already have the necessary skills, the potential of new employees is often more important for organizations using long-term employment strategies.*
2. The benefits of making good hiring decisions are highest when the organization has a lot of job applicants. **TRUE.** *Organizations with numerous applicants can be choosier about whom they hire, which increases the utility, or dollar value, of selection methods.*
3. Intelligence tests are very helpful for predicting who will be effective in almost any job. **TRUE.** *Intelligence*

tests are good predictors of work performance, and they demonstrate generalizability across settings.

4. Reference checking provides valuable information about prospective employees. **FALSE.** *Unfortunately, because of problems with defamation of character, reference checking provides very little useful information.*
5. You need to ask each applicant individualized questions to determine his or her true strengths and weaknesses. **FALSE.** *Asking applicants individualized questions creates problems with reliability. Structured interviews in which each applicant is asked the same questions are generally better than unstructured interviews.*

Javier's situation is one that almost all managers eventually face. When managers make good hiring decisions, they help the organization secure high-performing employees. These employees, in turn, help produce goods and services of high quality and low cost, resulting in competitive advantage for the organization. The principles discussed in this chapter can help improve hiring decisions.



SUMMARY

LEARNING OBJECTIVE 1

How is employee selection strategic?

Employee selection practices should align with overall HR strategy. Employees provide short-term talent when the organization hires from outside sources and long-term talent when the organization promotes from within. Employees offer specialist talent when they possess highly developed expertise in a particular area and generalist

talent when they operate in a variety of positions. Combinations of talent can be linked to overall HR strategies. Short-term generalist talent corresponds with a Bargain Laborer HR strategy, long-term generalist talent with a Loyal Soldier HR strategy, long-term specialist talent with a Committed Expert HR strategy, and short-term specialist talent with a Free Agent HR strategy.

Organizations need to achieve a strategic balance between job-based fit and organization-based fit. Fit is not critical for organizations with long-term

generalist talent. Organization-based fit is critical for organizations with long-term generalist talent. Job-based fit is critical for organizations with long-term specialist talent. Organization-based fit and job-based fit are both critical for organizations with long-term specialist talent.

Another staffing characteristic that underlies strategic employee selection decisions is the balance between potential and achievement. Organizations with long-term employees who are either generalists or specialists hire based on potential. Organizations with short-term specialist talent hire based on achievement.

LEARNING OBJECTIVE 2

What makes a selection method good?

Reliability, validity, utility, fairness, and acceptability represent five principles that are helpful for determining whether a selection method is good. Reliability concerns the consistency of the method. Validity represents the relationship between what the method measures and job performance. Utility focuses on the cost effectiveness of the method. Fairness concerns the effect of the method on individuals and minority groups. Acceptability focuses on how applicants react when they complete the selection method.

LEARNING OBJECTIVE 3

What selection methods are commonly used?

The usefulness of a particular selection method often differs depending on the context of the organization and job. However, a number of selection

methods generally satisfy the five principles for being effective. Common selection tests include cognitive ability testing, personality testing, physical ability testing, integrity testing, drug testing, and work sample testing. Cognitive ability and personality tests can be very useful for assessing potential to succeed. Other methods of information gathering include application forms and résumés, biographical data, and reference checking. Application forms and résumés are generally inexpensive methods for obtaining information about job applicants. The interview is another commonly used method of gathering information. Interviews are more reliable and valid when they are structured to ensure consistent treatment of each person being interviewed.

LEARNING OBJECTIVE 4

How are final selection decisions made?

Managers and human resource specialists should use good decision-making procedures to combine information from different selection methods. One procedure is predictor weighting, which allows more important selection methods to have a stronger influence on the final decision. Another procedure, labeled minimum cutoffs, requires successful applicants to achieve at least a minimum score on each method. A third procedure is multiple hurdles, where applicants must achieve a minimum score on one selection method before they can advance to the next method. A final procedure is banding, wherein employees with similar scores on a selection method are grouped into categories. People in a given category are seen as having the same score, even though their scores are slightly different.

KEY TERMS

Acceptability 216
 Achievement 208
 Alternate-forms method 210
 Assessment center 226
 Banding approach 235
 Behavioral Interview 232
 Biographical data 228
 Cognitive ability testing 217

Concurrent validation strategy 212
 Content validation strategy 211
 Correlation coefficient 210
 Criterion-related validation strategy 212
 Defamation of character 229
 Employee selection 202
 Fairness 215
 Integrity testing 224

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Long-term generalists	205	Situational interview	232
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Negligent hiring	229	Structured interview	232
Organization-based fit	206	Test-retest method	210
Personality testing	220	Utility	213
Potential	208	Validity	211
Predictive validation strategy	212	Validity generalization	213
Predictor weighting	234	Work sample testing	225
Reliability	209		

DISCUSSION QUESTIONS

1. How do the concepts of long- and short-term talent and generalist and specialist talent fit with overall HR strategy?
2. For what type of HR strategy is organization fit most important? When is job fit most needed? What type of organization should base hiring on achievement? What type should hire based on potential?
3. What is reliability? How is it estimated?
4. What is validity? How is it estimated?
5. What factors affect the utility of selection methods?
6. What is the difference between fairness and legality?
7. Why do people sometimes react negatively to certain selection methods?
8. What are the strengths and weakness associated with the following selection methods: cognitive ability testing, personality testing, physical ability testing, integrity testing, drug testing, application forms and résumés, biodata, work sample testing, reference checking, and interviewing?
9. Which selection methods are best for organizations with the various employee selection strategies?
10. What are the methods for combining scores from different selection methods?

EXAMPLE CASE

Outback Steakhouse

Outback Steakhouse, Inc., now a \$3.25 billion company with 65,000 employees and 1,100 restaurants worldwide, began modestly in the spring of 1988. A key to making Outback a great place to work is hiring the right people. One of the things we recognized early on is that you cannot send turkeys to eagle school: Smart leaders do not hire marginal employees and expect them to be able to keep the commitments of the company to customers or to remain very long with the company. If you start with the right people and provide a positive employee experience, turnover stays low. Thus, a rigorous employee selection process was developed in the early years of the company that is rooted in the Principles and Beliefs.

Outback's selection process for hourly and management Outbackers is proprietary; however, we can share some of the details here about the steps involved in the hiring process:

- All applicants are given a realistic job preview that shares both the benefits and the responsibilities of working for Outback. We explain to applicants that being an Outbacker means taking care of others, and we tell them how they will be held accountable for that.
- We share a document, called a Dimension of Performance, which provides detailed examples of the kinds of behavior expected of Outbackers and how those behaviors are tied to the vision of Outback. This is a candidate's first exposure to our vision. (At this point, some candidates have withdrawn from the process because these dimensions set a very high standard.)
- When candidates agree to move forward in the process, they are asked to complete an application. The information they provide is reviewed with an eye toward determining if the candidate can perform the job, fit into the Outback culture, and stay with the company.
- Successful applicants are assessed for their cognitive ability, personality, and judgment through a series of tests that have been validated against existing Outbackers who have been successful in the company.
- Applicants who pass these tests are interviewed using questions that probe not only their experience but also their orientation toward aspects of the Outback culture, including service mindedness, hospitality, teamwork, and ability to think on their feet.

QUESTIONS

1. How do the employee selection methods at Outback Steakhouse help achieve competitive advantage?
2. How important is organization fit for Outback Steakhouse?
3. Why does Outback Steakhouse order the selection methods such that applicants first complete an application, then complete tests, and then participate in an interview?
4. Why do you think these selection methods are valid?

Source: Tom DeCotiss, Chris Sullivan, David Hyatt, and Paul Avery, "How Outback Steakhouse Created a Great Place to Work, Have Fun, and Make Money," *Journal of Organizational Excellence* (Autumn 2004): 23–33. Reprinted with permission of John Wiley & Sons, Inc.

DISCUSSION CASE

Stringtown Iron Works

Stringtown Iron Works is a small fictional shipyard on the East Coast dedicated to ship overhaul. It focuses on obtaining government contracts for overhauling naval ships. These overhauls require Stringtown to maintain a quality workforce that is capable of rapid production. The position of pipe fitter is particularly critical for success.

Pipe fitters are responsible for repairing and installing the piping systems on board the vessels. Employees in the pipe fitter classification may also be called on to work in the shop building pipe pieces that are ultimately installed on the ships. Like most union jobs in the yard, pipe fitters are predominantly white males between the ages of 30 and 45. As part of the most recent bargaining agreement, work is primarily done in cross-functional teams.

Job Description

Job: Pipe fitter

Pay: \$12.00 to \$20.00 per hour

A pipe fitter must:

1. Read and interpret blueprints and/or sketches to fabricate and install pipe in accordance with specifications.
2. Perform joint preparation and fit-up to fabricate and install brazed and welded piping systems.
3. Perform layout and calculations to fabricate and install pipe.
4. Fabricate pipe pieces up to 10" in diameter and up to 10' long to support shipboard pipe installation.
5. Install ship's piping, such as water, drains, hydraulics, lube oil, fuel oil, high temperature air, etc. on location and within tolerances per design.
6. Inspect and hydro test completed piping systems to ensure compliance with ship's specifications.
7. Use a variety of hand and power tools to perform joint preparation, assembly bolt-up, and positioning during fabrication and installation.
8. Utilize welding equipment to tack-weld pipe joints and to secure pipe supports to ship's structure.

Completion of the above tasks requires pipe fitters to do the following:

- Frequent lifting and carrying of 25–50 pounds
- Occasional lifting and carrying of over 50 pounds
- Occasional to frequent crawling, kneeling, and stair climbing
- Frequent pushing, pulling, hammering, and reaching
- Frequent bending, stooping, squatting, and crouching
- Occasional twisting in awkward positions
- Occasional fume exposure

QUESTIONS

1. Which of the overall HR strategies would be best for Stringtown Iron Works?
2. Should Stringtown focus on job fit or organization fit?
3. Should Stringtown hire based on achievement or potential?
4. What selection methods would you recommend for Stringtown? Why?

**EXPERIENTIAL
EXERCISE***Learning through Interviewing*

Interview a family member, friend, or someone else who has a job you would like to someday have. Learn about the hiring practices of the organization where this person works. Ask questions like the following:

1. What makes the company different from its competitors? Does it focus mostly on reducing costs, or does it try to provide goods and services that are somehow better than what competitors offer?
2. What tasks do you do on the job? What knowledge, skills, and abilities do you need in order to do this job effectively?
3. How long do most people stay at the company? Is this a place where most people work for their entire career? How long do you think you will continue working with the company?
4. What did you have to do to get hired at the company? Did you take any tests? Did they ask for a résumé? What was the interview like?
5. What type of qualifications do you think are most important for someone who wants to work at your company? If you were making a decision to hire someone to work with you, what characteristics would you want that person to have? How would you measure those characteristics?

Using the information obtained from the interview, do the following:

1. Identify the competitive business strategy of the organization.
2. Identify the human resource strategy of the organization.
3. Evaluate whether the competitive business strategy and the human resource strategy fit.
4. Evaluate the effectiveness of the organization's selection methods for achieving its human resource strategy.
5. Make recommendations about the selection methods that you think would be most appropriate for the position of the person you interviewed.

INTERACTIVE EXPERIENTIAL EXERCISE

Employee Selection: Choosing the Best of the Best for Graphics Design, Inc.

<http://www.wiley.com/college/sc/stewart>

Access the companion website to test your knowledge by completing a Graphics Design, Inc. interactive role play.

In this exercise you have identified several potential candidates for the new positions at GDI, and it is now time to begin the selection process. In designing the appropriate selection system for the company, you must consider reliability, validity, utility, legality, and acceptability, along with common testing methods, information-gathering sources, and interview types. Whatever system you choose, you know that you'll need to gain buy-in from the managers who need these new employees. You know, too, that the system must support GDI's basic HR strategy, the Loyal Soldier strategy. Your recommendations on the appropriate selection system are due this afternoon. What will it look like? •

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