How to Better Predict
Candidate Job Performance

Without a doubt, the most frustrating aspect of hiring new employees is finding out that a candidate who “looked good on paper” and “interviewed well” ended up performing below expectations once hired. Worse is that these experiences can leave you feeling uncertain about your capabilities and cause you to lose faith in what seemed to be a good hiring process.

Fortunately, there are a number of ways that you can minimize or avoid such mistakes. In this edition of the Best Practices Series, we’ll look at ways in which you can increase the power of your screening and evaluation methods, which will help you to better predict the future performance of job candidates.

Best Practice #1: Identify Attributes Critical to Success

At the heart of any powerful hiring process is an understanding of what makes high performers different than their less successful peers. This requires you to identify the competencies (knowledge, skills, abilities, and behaviours) that differentiate performance within a particular position, team, and organization.

With a well-defined competency model, you’re in a much better position to determine the quality of your candidate pool, and can proceed with exploring these attributes in an objective, fair, and structured manner. The alternative is relying on subjective opinions and personal biases, which often leads to frustrating, time consuming, and costly hiring mistakes.

The most effective models are those that include only those competencies that are directly related to success in the organization, at a specific job

Example of a Behavioural Competency

**Conflict Management**

Resolving disagreements in a professional manner, considering the best interests of all parties involved.

- Deals with conflict quickly and directly.
- States opinions and concerns openly yet diplomatically.
- Listens to and respects conflicting points of view.
- Maintains a calm and professional demeanour in conflict situations.
- Works to find “win-win” solutions to conflicts.
level, and in a certain job or job family. For example, if your organization is an entrepreneurial start-up, “Adaptability” and “Innovation and Creativity” may be critical to any employee’s performance – in this case, all candidates should be evaluated against these competencies before they’re hired. For executive candidates, you may also need to assess competencies such as “Strategic Thinking” and “Change Management”, to reflect the challenges encountered at higher levels of the organization.

It’s important to ensure that subject matter experts be involved in the creation of the competency model; in other words, people who have a well-developed knowledge of the organization, level, and/or job. The group also needs to ensure that competencies are clear, simple, and easy to measure so that they are not only relevant and insightful but also practical and used consistently by those who would most benefit. Models with too many competencies, levels, or complicated language often sit on a shelf gathering dust, despite best intentions.

For those with little experience using competencies, one path to developing a competency model is to choose from off-the-shelf dictionaries that have been created by an external firm. These can be useful and less expensive than a customized model, but can be less accurate simply because they are more generic. At the very least, be sure to review the dictionary to ensure the competencies are well-defined, clear, and can be easily applied.

Another alternative is to have Industrial/Organizational Psychologists create a tailored competency model for your organization, by partnering with key stakeholders and subject matter experts to fully understand what attributes lead to success. They will not only be able to customize the model to increase its relevancy to the organization, team, and job, but also validate the accuracy of the model in helping to predict performance.

**Best Practice #2: Use High Quality Assessment Methods**

Every employer uses some type of screening and evaluation method during the hiring process. Unfortunately, many rely on methods like the resume review that have been found to be relatively weak predictors of performance (beyond confirming basic qualifications).

An influential review of 85 years worth of research, conducted by Dr. Frank Schmidt and Dr. John Hunter, showed that the information included in a resume has a predictive power of approximately 96% for unknown candidates and only 4% for resumes, indicating that resumes alone are not a reliable indicator of performance.
accounts for at most 4% of candidate’s future job performance; which means that 96% of the candidate’s potential is still left unknown. This would be like trying to predict the performance of a complex piece of equipment after reading only four pages of a 100-page technical manual. Other traditional methods, like unstructured interviews and reference checks, were found to account for about 14% and 6% of performance, respectively.

However, research on the power of other assessment methods and approaches have been more promising. For example, these studies demonstrated that a single well-designed cognitive ability test can be 6.5 times more powerful than a resume for helping you predict job performance. This makes sense if you consider that education and experience (i.e., the information in a resume) has far less of an impact on performance than an employee’s ability to learn from that experience, solve work-related problems, and demonstrate good judgement in applying knowledge and skills (i.e., cognitive ability).

Here are a few points to keep in mind when considering the type of additional methods to include:

1. **Ensure that you choose assessment methods that are specifically designed to evaluate critical competencies.** For example, if one of the key competencies for your vacant accounting role is “Numerical Problem Solving”, the right method may be a test of numerical reasoning skills. If successful managerial candidates need to be good at “Developing Others”, you should ask structured interview questions about their past
approach to performance management and have them take part in a relevant coaching simulation.

2. **Consider the job and the level at which a successful candidate should function.** An administrative assistant may also require good numerical problem-solving skills but, unlike an accountant, the most appropriate tests should include tasks like data checking and basic calculation. On the other hand, the right numerical reasoning test for an executive may include high-level budgeting exercises and require them to identify trends in numerical charts and data. If you decide to use psychometric instruments, be sure to check with your provider to ensure that they are of a suitable type and difficulty level, and that norm groups provide an appropriate comparison for your candidates.

3. **Check that the assessment method conforms to established quality standards.** This means ensuring that the instruments and approaches you plan to use have been found to be highly reliable and valid – that each method measures what you intend it to measure (e.g., job performance) and can do so consistently. The best way to ensure the reliability and validity of specific instruments is to review existing research literature and publications such as the Mental Measurements Yearbook from The Buros Institute. Companies that publish specific instruments should also be able to provide you with detailed technical manuals, which provide background on how the instrument was developed, how it should be used, and any studies that support the quality of the tool. If in doubt, talk to a psychometrics professional who can offer guidance.

4. **Use a variety of methods to evaluate candidates.** Studies on incremental validity have shown that using a set of appropriate assessment methods that complement one another can greatly increase your chances of hiring the right candidate. For example, research shows that while a structured interview alone accounts for 26% of...
performance, a cognitive ability test and structured interview accounts for 40% (essentially, cutting your risk of making a hiring mistake in half).

Keep in mind that no hiring process is perfect. People are very complex and we can only hope to decrease uncertainty (not eliminate it entirely) by gathering as much job-relevant data as possible before making our hiring decision.

**Best Practice #3: Improve Your Current Approach**

Although research has shown that resume reviews, unstructured interviews, and reference checks are relatively weak predictors of job performance, we’re not suggesting that you simply stop using them. However, there are ways to greatly improve the value of these traditional approaches and use them to gather more useful data about candidate potential.

The key is to use more objective structured versions of these traditional methods. For example, research shows that typical unstructured interviews are much less powerful than structured versions, the former predicting 16% of performance and the latter 26%.

Here are a few ways to increase the structure of your current interview approach:

1. **Build your list of questions using critical competencies.** This will ensure that you are asking only job-related questions, which not only increases the predictive power of the approach but also helps prevent legal repercussions of what candidates may feel to be unfair screening methods.

2. **Ask the same questions.** You can certainly probe further when you identify any “red flags” but you should still ensure that all candidates have an equal

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**Example: Structured Interview Questions**

1. Walk me through your approach to delegation, using a recent example.
   - What types of tasks do you delegate? Why?
   - What types of tasks do you work on yourself? Why?

2. Tell me about a time when you delegated a task to someone, who ended up letting you down.
   - In hindsight, what were the key reasons that the individual didn’t perform to expectations?

**Example: Rating Scale**

- Demonstrates trust and confidence in others to perform (i.e., does not micromanage).
- Provides support and resources to others after having delegated work.
- Delegates challenging tasks that help to develop others’ capabilities.
- Follows-up on tasks that have been delegated.
- Holds people accountable for results after having delegated work.
opportunity to respond to interview questions.

3. **Require that candidates respond in a structured manner**, starting with an description of the situation, actions taken, and the result of their actions. This will make it much easier to gather data for your ratings and to compare ratings across interviewers.

4. **Evaluate candidates using an objective ratings scale**, which subject matter experts have agreed are appropriate for judging capability. Make sure that the rating scales are described clearly and concisely, and reflect observable behaviour.

These principles can be applied to the resume review and reference check as well, to increase their value. For example, instead of simply gathering resumes, require that applicants answer structured application questions based on the critical competencies that you intended to identify in resumes. These should certainly include questions about basic qualifications but could also include items that ask about competency in important technical areas.

In terms of improved reference checking, you should again build your list of reference questions based on critical competencies, ask the same questions of all raters, require raters to respond using observable behaviours, and use a standard rating scale to evaluate responses.

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**Example: Structured Application Form (improved “Resume”) for a Human Resources Manager Vacancy**

1. **What is your highest level of education?**
2. **How many years have you worked in Human Resources?**
3. **What was your largest budget responsibility, in dollars?**
4. **How many years have you worked in a leadership role?**
5. **What was the largest number of direct reports for whom you were responsible?**
6. **Do you have your CHRP designation?**

Please provide a rating of your level of expertise, for each of the following Human Resources practice areas, and a short example to support your rating (these will be verified).

**Staffing (Recruitment and Selection, Deployment, Terminating and Outplacing Staff)**

- **N/A** - have no experience in this area.
- **Novice** - would like training and guidance until fully comfortable; have less than 2 years of experience in this area.
- **Competent** - would appreciate guidance on more complicated matters; have more than 2 years of experience in this area.
- **Proficient** - could work without guidance; have more than 5 years experience in this area.
- **Expert** - could be a mentor or teach a course; have more than 10 years of experience in this area.
You can further increase the value of references by gathering data from a larger number of people who have worked with the candidate in different capacities. This will help you to not only gather more information but also determine the reliability of ratings and comments, by allowing you to identify key themes and trends. For instance, if most raters make comments regarding detail orientation being a potential development need, you can be much more certain of it being a performance concern, than if it were mentioned by one individual.

You can limit the problem of reference leniency (i.e., all raters providing positive feedback) and determine reliability by requiring that raters indicate at least one exceptional strength and one development need from your list of competencies. This forces raters to pick out what they feel are true talents and potential limitations, especially if you require a more thorough example should a rater indicate that a competency is a strength or need.

We hope that this article provides a good starting point for you for improving the power of your current selection process. For more information, please visit us at www.hireinsightgroup.com and www.leadershipstore.com or contact us directly at info@hireinsightgroup.com.

*Research statistics and references provided on Page 9.*

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How We Can Help
The Leadership Store and The Hayward Group offer a number of programs to help clients gather more objective information and better predict candidate performance. All of these were designed according to the research and best practices outlined in this article.

**Competency Development Programs**

The screening and assessment programs we provide to clients are all based on a comprehensive Needs Evaluation, which includes subject matter experts choosing critical attributes from our well-defined competency dictionary.

We can also facilitate competency development workshops, to create customized models that typically include:

- **Core Competencies**: attributes that determine success for all employees and reflect organizational values, culture, vision, and strategy.
- **Leadership Level Competencies**: attributes that determine success at various levels of leadership (e.g., Executives, Managers, Team Leaders).
- **Job and Job Family Competencies**: attributes that determine success within specific types of positions (e.g., Information Technology, Operations).

**Screening and Assessment Programs**

All of our screening and assessment programs include high-quality instruments and methods, such as cognitive ability tests and structured interview guides. Each of these are chosen specifically for their relevancy to the role and job level. Optional additions, like structured interviews and comprehensive assessment centre activities conducted by trained assessors, can be added to further increase hiring confidence.

A new but popular addition is the online 360° Reference Check that provide comments and ratings from individuals’ former managers, peers, direct reports, and clients on up to ten critical competencies. Some prominent features include a fully structured and job-related set of questions and ratings scales, anonymity of raters, and the requirement than raters indicate at least one talent and development need with supporting examples (this results in much more balanced feedback than is the case with traditional reference checks).

For more information, please visit [www.haywardgrp.com](http://www.haywardgrp.com).
Supporting Research

For readers who are interested in statistics, we’ve included the following section to provide a sampling of results from prominent studies.

Resumes

- The information in a resume, specifically education and experience, accounts for 1% and 3% of performance, respectively.  
  (Schmidt & Hunter 1998)

- Approximately 25% of resumes and applications contain inaccurate information.  
  (Aamodt, 2003)

- Experience is more helpful for predicting success when candidates have less than 5 years of experience, accounting for 11% of job performance at that stage of people’s careers; after 5 years, experience has a very small influence on performance.  
  (Schmidt & Hunter, 1992; Schmidt, Hunter, & Outerbridge, 1986)

Work Sample Exercises

- The most powerful predictor is the work sample exercise, which accounts for 29% of job performance. These exercises require candidates to perform tasks that are similar to those that are performed on the job, such as creating computer programs or giving presentations.  
  (Schmidt & Hunter 1998)

  More recent research suggests that work samples may not be this powerful, however, and that they may account for as little as 11%, depending on the quality of the exercise.  
  (Roth PL, Bobko, & McFarland, 2005)

Cognitive Ability Tests

- The most cost-effective assessment method is the cognitive ability test, which predicts 26% of job performance.  
  (Schmidt & Hunter 1998)

- Cognitive ability tests are the best predictors of job-related learning and success in training programs; candidates who score higher on these tests learn more and acquire knowledge faster than their peers.
Job Knowledge Tests

- Job knowledge tests are very good predictors of job performance; test results have been found to account for 23% of job performance.  
  *(Schmidt & Hunter 1998)*

Personality (Behavioural Style) Questionnaires

- Measures of conscientiousness account for 17% of job performance, indicating that certain aspects of personality and behavioural style are important to success.  
  *(Schmidt & Hunter 1998)*

- Personality questionnaires must be chosen with caution in that hiring managers should only focus on attributes that are important in the context of certain jobs; the power of the personality questionnaire will depend on its ability to evaluate attributes important to success in a certain situation, with specific responsibilities and challenges (e.g. competencies).

Appropriate questionnaires and attributes have been found to predict positive work behaviours such as helping others and working longer hours, as well as customer service, sales effectiveness, creativity, and leadership. One of the key differences between ability tests and personality questionnaires is that the former predicts “can do” while the latter predicts “will do” behaviours.  
  *(Hough & Oswald, 2005; Hough & Furnham 2003)*

- Research shows that personality predicts contextual performance; contextual performance refers to a range of employee behaviours associated with helping others, building relationships, exerting effort, following rules, etc. which facilitate task performance and the achievement of organizational goals.  
  *(Mohammed, Mathieu, & Bartlett, 2002; Motowidlo & Van Scotter, 1994; Organ & Ryan, 1995).*

Interviews

- There is a significant difference between the power of the unstructured interview, accounting for 16% of job performance, and the structured interview, accounting for 26%.
(Schmidt & Hunter 1998)

A structured interview administered by one interviewer obtains the same level of validity as three to four independent unstructured interviews.
(Schmidt & Zimmerman, 2004)

Reference Checks

- A structured reference check predicts supervisory ratings of job performance, accounting for 13% of performance; this is significantly better than the 6% accounted for by traditional unstructured references.
(Taylor et al., 2004)

Assessment Centres

- A meta analysis of many studies on the power of assessment centres showed that they predict up to 15% of job performance.
(Arthur, Day, McNelly, & Edens 2003)

However, research has demonstrated that the quality of assessment centres can have a strong impact on their power, and that many are not developed properly, which could suggest that they account for more performance than meta analyses show. Some issues include (1) poor planning, (2) inadequate job analysis, (3) weakly defined dimensions, (4) poor exercises, (5) no pre-test evaluations, (6) unqualified assessors, (7) inadequate assessor training, (8) inadequate candidate preparation, (9) sloppy behaviour documentation and scoring, and (10) misuse of results.
(Caldwell, Thornton, & Gruys 2003)

- Research has shown that assessment centres can be especially helpful when used alongside other high-quality methods, in that they explain a substantial proportion of variance in job performance beyond cognitive ability and personality.
(Hoffman, Woehr, and Fleisher, 2008)

Assessment Combinations

- The most cost-effective combination of assessment methods is a cognitive ability test and structured interview, which together account for 40% of job performance.
(Schmidt & Hunter 1998)
References


