

OUR SCIENCE

Plum is the world's most accurate top-of-the-filter employment assessment.

Plum's team of scientists have automated and redesigned the same quality psychometric testing that selects CEO's for Fortune 500 companies, making these capabilities available to recruiters at all levels of your organization. This means you can be confident you're selecting the best match for your unique roles while reducing turnover and costs associated with bad hires.

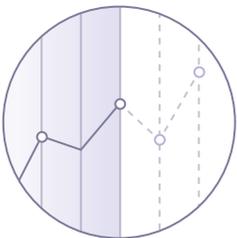
WHY WE USE THE SCIENCE THAT WE DO

There is a better way to hire than simply “gut instinct.” Science can answer a lot of the questions we have regarding who will be a great fit for any particular job. From company to company, each job is different and to hire the very best from a sea of 100’s of applications and resumes, a new way had to be created. We identified a few main areas that needed major improvements over current assessments.



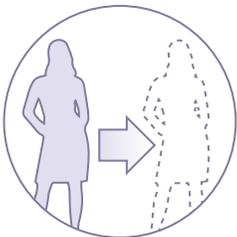
ANTI-GAMING MEASURES

Plum Talent Assessment is specifically designed to prevent applicants from misrepresenting their dispositions at work.



PERFORMANCE PREDICTION

Assessing for cognitive & social intelligence and personality is the cornerstone of the Plum assessment.



PLUM MATCH SCORE

Plum takes insights from employers for each job they are filling and calculates to what extent applicants will succeed.



GREATER VALIDITY

The above culminates in a set of tools that is up to three times more valid than most competitors.



ANTI-GAMING MEASURES

Most of us realize that job applicants will try to put their best foot forward during a job interview in order to create a favorable impression and better compete for a job offer. Personality inventories are no different, as applicants will try to “game” the tests by denying any negative behavioral tendencies in order to raise their scores. Unfortunately, most commercial personality inventories are not constructed to make it difficult for applicants to do this, utilizing simple ratings scales or true/false formats where the desirable response is obvious.

Entire books in the popular press have been devoted to instructing people on how to fake answers to these tests and avoid flagging lie scales (for example “Ace the Corporate Personality Test” by Edward Hoffman). Research has consistently shown that applicant “faking” happens on these types of inventories with alarming frequency and that it can destroy the capability to predict future job performance (Griffith & Peterson, 2006; Ziegler, McCann, & Roberts, 2011).

Here is a typical question used in some of the most popular assessments today

You hand in work:

- Late, with mistakes
- Late, with no mistakes
- On time, with mistakes
- On time, with no mistakes



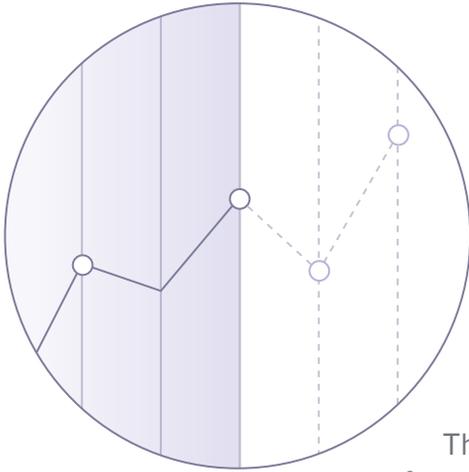
ANTI-GAMING MEASURES

The personality sections of the Plum assessment are specifically designed to prevent applicants from misrepresenting their behavioral tendencies and claiming to have positive dispositions at work. The format used presents clusters of adjectives and behavioral statements and asks applicants to choose those that are most true of them. The key is that the options have all been matched on how attractive they appear and applicants do not know how they are being scored for a particular role or job in an organization.

The science behind the “forced-choice” methodology has been firmly established and applicants cannot successfully game the test. Because of this, when most personality inventories are given to actual applicants the validity is a fraction of what might be seen when people were candid and a job was not on the line. Research has consistently shown that forced-choice inventories maintain their validity even when given to the most motivated job applicants, but commercial inventories using rating scales or true/false do not (Bartram, 2007; Christiansen, Burns, & Montgomery, 2005; Hirsh & Peterson; 2008).

Plum implements a “Forced-Choice” personality survey

Choose one Least like you		Choose one Most like you
<input type="radio"/>	I usually need a creative outlet	<input checked="" type="radio"/>
<input type="radio"/>	I tend to take an interest in other people's lives	<input type="radio"/>
<input checked="" type="radio"/>	I don't mind taking charge	<input type="radio"/>



PERFORMANCE PREDICTION

Most commercial psychometric assessments focus either on personality traits or cognitive abilities related to intelligence. This represents a huge limitation as each type of psychological differences have been shown to predict job success based on hundreds of research studies on the validity of psychometric tests used in business.

The Plum assessment process includes both personality AND cognitive factors to provide a complete assessment of the talent that applicants will show on the job. Research has shown that combining the results of multidimensional assessments of personality and intelligence will typically have twice the ability to predict job success than either type of assessment alone (Schmidt & Hunter, 1998; Tett & Christiansen, 2007).

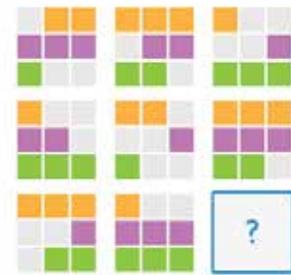
PLUM PROBLEM SOLVING TEST

Our Plum Problem Solving Test assesses the capacity to think logically and solve new problems. The questions ask candidates to identify patterns and relationships in order to determine the correct answers.

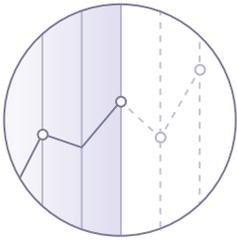
The questions are designed to estimate applicants' potential in using mental processes required to solve work-related problems or to acquire new job knowledge. Research has shown scores on these tests consistently predict how successful candidates are in training and making effective decisions on the job.

More importantly, high performers get more questions correct on such tests than low performers because all jobs require learning and problem solving. Because of this, cognitive ability tests have been shown to predict performance across jobs and organizations that use them in hiring are more productive and have lower turnover as a result (Schmidt & Hunter, 1981). Moreover, the relationship between scores on tests that require problem solving and job performance is stable over time (Murphy, 1998) and predicts job success beyond other prerequisites, such as work experience and employment interviews (Schmidt & Hunter, 1998).

Our Plum Problem Solving Test is similar to tests that are said to measure "fluid" abilities, in that it does not require language or much by way of acquired knowledge to solve the problems. These fluid abilities are most related to pattern recognition and deductive reasoning. The most comprehensive review of the validity of this type of employment test was conducted by Postlethwaite (2011) based on the results of dozens of studies and thousands of job candidates. This review showed that scores have a stronger statistical relationship to job performance than the typical job interview at a fraction of the cost. The questions used by the Plum Problem Solving Test was developed by examining the tests used in these studies and constructing similar items.



Plum Problem Solving Test Example



PERFORMANCE PREDICTION

PLUM SOCIAL INTELLIGENCE TEST

Organizations have become increasingly aware that having interpersonally effective employees represents a competitive advantage and that socially inept workers create conflicts and lose customers. Although selection tools, such as structured interviews and assessment centers, are useful for gauging interpersonal competencies, they are costly and impractical when there are large numbers of applicants that need to be screened.

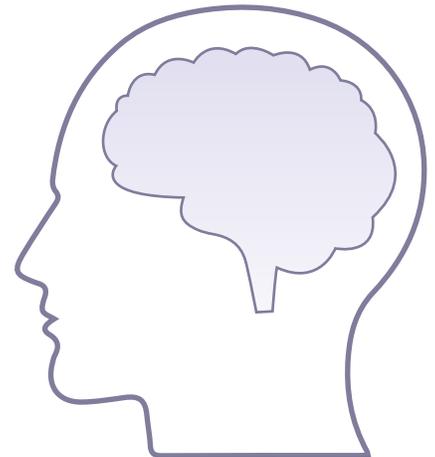
Our Plum Social Intelligence Test assesses individual differences in the ability to understand social cues and anticipate the impact of different actions on the thoughts and feelings of others. The situational intelligence item format involves presenting a work situation and requesting the candidate to evaluate the effectiveness of different courses of action, selecting the actions they believe would be the least and most effective as responses to the problem. McDaniel and his colleagues (2001) examined over 100 research studies that linked social intelligence test scores to job success and showed that there was a strong relationship.

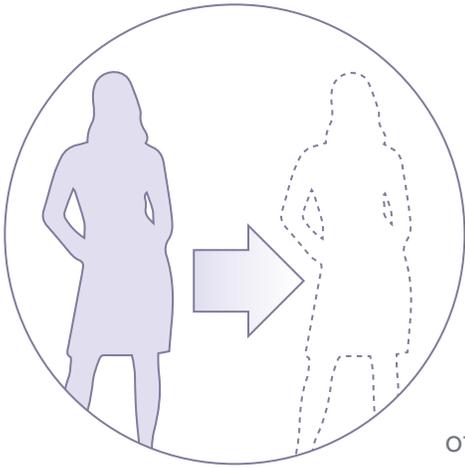
The questions on our Plum Social Intelligence Test have been extensively researched. Scores on the items of the test have been linked to performance in work situations common to most jobs and to actual observations of socially effective work behavior (Unterborn and colleagues, 2011; Laginess and colleagues, 2012).

COMBINING PERSONALITY & INTELLIGENCE DIMENSIONS

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PLUM MATCH SCORE

Plum Match Scores provide an overall estimate of how well the traits and abilities of each applicant fit with what is required for a given role or job. Beyond being a simple way for users to sort applicants based on the extent they have what is needed for success, Plum Match Scores have several advantages over the assessment results of other commercial personality inventories.

A key component to the Plum Match Scores is to narrow the number of traits and abilities down to just those that are most relevant to the role or job. For any given position, at least half of the dimensions on a psychometric assessment may not actually predict success; the trick is to identify those that will. Research has shown that scores on dimensions identified as relevant by job experts predict performance much better than those that were not (O'Neill, Goffin, & Rothstein, 2013).

Plum Match Scores customize the scoring of the assessment to focus on those dimensions that are important for success. Typically, this is based on the expert judgments of hiring managers and top performers in the organization that are collected through a structured survey process designed to collect job information from those that know the position best. Because of this, the profile of what is important for success as a bank teller will look very different than that of a customer service representative and a candidate could have a high Plum Match Score for one position but not the other.

The process of merging the results of the psychometric assessments with the judgments of job experts has proven to be the most robust method for identifying top candidates (Tett, Jackson, & Rothstein, 1991; Tett, Jackson, Rothstein & Reddon, 1999). This also “sorts the wheat from the chaff” and allows decision makers to not be distracted by assessment results that do not predict success. The science behind how the Plum Match Scores are computed ignores dimensions that are not important and prioritizes those that are.

97
MATCH

Sheila Einstadt
Applied Oct 16

89
MATCH

Frederick Dickerson
Applied Oct 12

74
MATCH

Paul Synofsky
Applied Oct 8

62
MATCH

Lisa Rallis
Applied Oct 22

WHAT PLUM ASSESSES FOR

The Plum Talent Assessment assesses for 12 attributes. Ten of these attributes are based on the psychological five-factor model (FFM) or “Big Five” personality model. The last two attributes revolve around intelligence, problem solving and social intelligence.

		
For your next hire, if you want...	You'll need:	“Big 5” Term
Self-management, keeps up with pace of work, constantly improving, deadline and objective driven, and doesn't settle for “good enough.”	INDUSTRIOUSNESS	CONSCIENTIOUSNESS
Detailed, goal and priority oriented, thorough and accurate, a planner, organized, cost conscious, adheres to policies.	ORDERLINESS	
Remains, calm, composed, pleasant, helpful, level-headed, objective and impartial during stressful situations and conflicting demands.	STABILITY	STRESS TOLERANCE
Accepts criticism and feedback (and looks for it), remains positive through obstacles, and takes responsibility for their actions and errors.	SELF REGARD	
Creates innovative approaches and ideas to solve difficult problems, gathers and analyzes data and information to improve performance.	INTELLECTUAL DISPOSITION	OPENNESS
Highly adaptable, learns and applies new skills, initiates enhancements and integrates them well into existing plans and procedures.	EXPERIENTIAL DISPOSITION	
Attracts people with friendly interactions, conveys a positive attitude and outlook even others are upset or rude, builds a positive team spirit.	ENTHUSIASM	EXTRAVERSION
Seeks to be a driving force, motivates and manages others, leads activities with authority, decision making, delegating to others and persuasiveness.	ASSERTIVENESS	
Encourages mutual trust, respect, and cooperation among team. Helps, advises and encourage new people. Supportive, courteous and sensitive.	COMPASSION	AGREEABLENESS
Keeping others adequately informed and consulted despite pressing deadlines. Builds long-term strategic relationships with difficult people.	MANNERLINESS	
Understands complex ideas, learns quickly from experience, develops plans, and overcomes obstacles by reasoning	PROBLEM SOLVING	COGNITIVE ABILITY
Understands people and social cues leading them to be more effective interacting with other people.	SOCIAL INTELLIGENCE	

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