



Soup for Corporate Souls Psychometric Assessments

1	3	6	9	12	16	18
KSA Glossary	Why?	Insights into Psychometrics	Draw from Case Studies	Measurement	Challenges	Parting Note

Table of Content

Knowledge, Skills & Attitude

In the world of today, there are three types of training – knowledge (K), skills (S), and influencing attitude (A), frequently shortened to the KSA acronym. Benjamin Bloom was the man to bring this classification some clarity, primarily through his taxonomy – a system for levels of behavior important in learning.

GLOSSARY

Type of Learning	What Bloom called it
Knowledge	Psychomotor
Cognitive	Attitude
Skills	Affective

Why define them so explicitly? Mostly because Knowledge, Skills, and in some cases, Attitude are words understood and very interchangeably used by everyone. It's no one's fault, honestly. Can we blame someone for believing Mr. X possesses the right skills for the job because of his vast knowledge of it during an interview?

Assume the existence of a candidate with an extraordinary palate for spices. Yum. Everyone loves a good plate of the finest of any cuisine. Better yet, assume the existence of a candidate with extensive knowledge of all things food – from how it is made to its effects on your taste buds and tummy.

Now that is an impressive resume right there. On paper, this candidate should perform pretty amazingly in a kitchen. Test it out. Ask for a chocolate mousse. You just might get it done to perfection. Alternatively, you just may have put the worst tasting concoction inside your mouth.

What the chef lacked here was the necessary skills. Having knowledge is merely the primary step, rigorous rounds of hands-on practice results in the development of usable skills. In fact, a candidate's ability to transfer knowledge to skills is what distinguishes a pretender from a chef. This is probably why food critiques stick to blogging and not cooking.

But then, what of the 'A' of the KSA? Attitude. It refers to the ability to deal with things emotionally, such as feelings, motivation, and enthusiasm. Although attitude is not taught, training may affect it. Simply put, while it is somewhat difficult to change attitude, it is very possible to influence it.

Organizations have often discussed if top-notch performance is hindered more by will than skill. This refers to anyone in possession of a skillset, but without the will to use it.

The Pink Panthers, the greatest network of international jewel thieves, may scour the ends of the earth to find the best lock picker in the world, and even find him. However, is that hire of any use with a strong sense of the law? The organization did not go wrong in assessing for knowledge and skills; they simply failed to understand that their newest recruit was not a thief.

KSAs are easily identified to an intricate web, each delicately connected and dependent on the other, and yet completely different by definition. Organizations have begun to realize the importance in understanding the difference between the three, and how best to utilize that information in tracking the right candidates. It is a two-word answer. Psychometric Assessments.

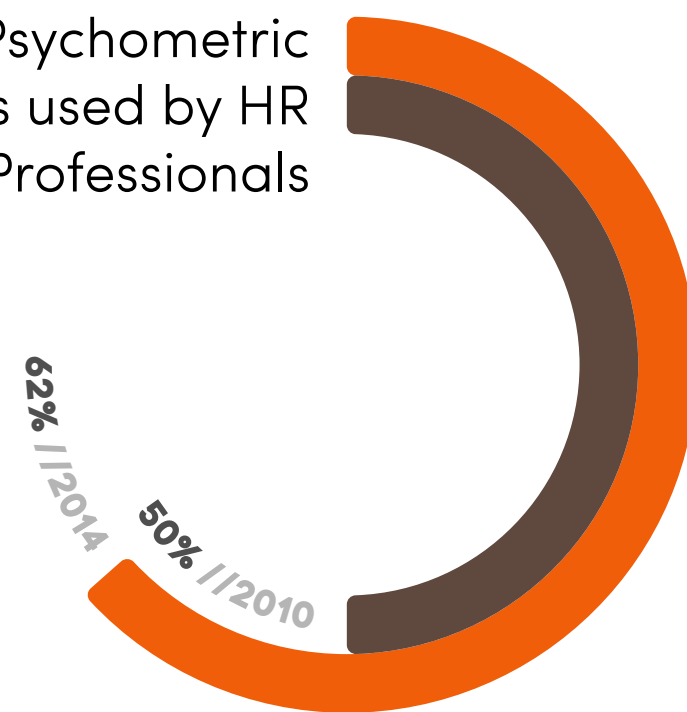
Why?

In 1869, Francis Galton, a pioneer in eugenics and the phrase “nature versus nurture”, published a book titled – Hereditary Genius. It was the first social scientific attempt to study genius and greatness. It identified different characteristics people possessed, and how those characteristics made them fitter than others.

Why bring up Galton? Primarily to focus on the two words – genius and greatness. After all, who would not want one and/or the other in their organization? In the early 2000s, when prospects applied for jobs, a typo-free resume, interview smarts, and a few good references would often emerge as all they needed. But today, organizations are beginning to realize that landing a gig may very well come down to your, you guessed it – innate personality.

Enter Psychometric Assessments

No. of Psychometric
Assessments used by HR
Professionals

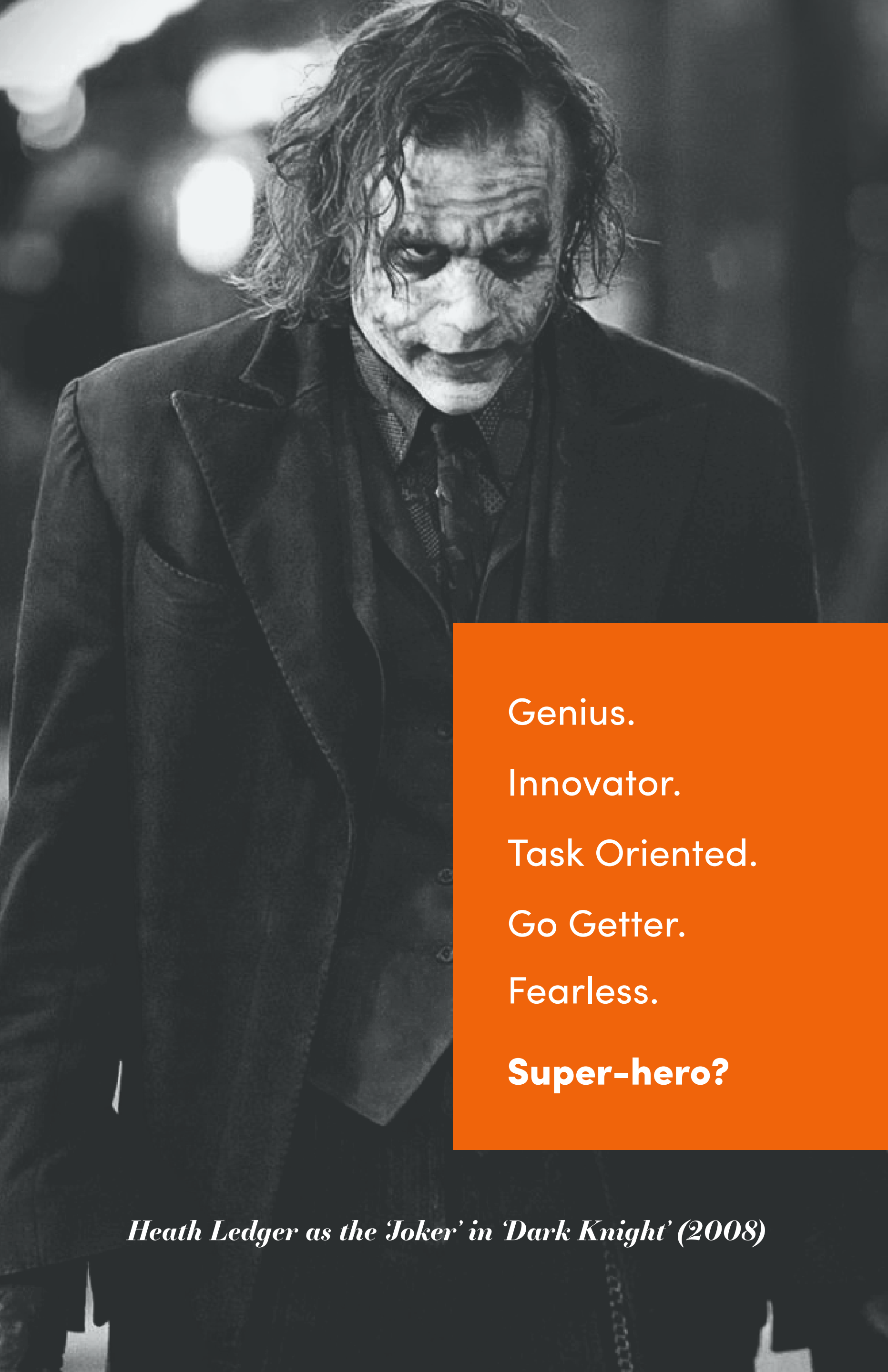


In a 2014 trends report from a business advisory company, 62% of human resource professionals used psychometric assessments for vetting candidates in the hiring process. Compare that to less than 50% in 2010, according to a different research firm.

“ Look at behavioral traits, and by analyzing them, we can indicate competency for a job

— PAUL GORRELL

Ph.D., founding principal of development firm Progressive Talent.



Genius.

Innovator.

Task Oriented.

Go Getter.

Fearless.

Super-hero?

However, do not forget **Genius & Greatness**

We are all familiar with Joker from Batman, popularized to mainstream levels by Nolan's 'The Dark Knight'. Imagine the Joker applying for the job of Gotham's protector. Imagine a panel of interviewers checking his resume. On paper, he is a genius just the same as Batman, with the potential for greatness just the same as Batman.

Fortunately, for Gotham, superheroes never emerged from job applications. If they did, we would have a movie about a man in a purple suit and clown makeup, trigger-happy and massacring every petty thief on sight, eating a puppy every now and then just because.

In this case, the interviewer in all honesty has done no wrong. He or she looked for the best traits to find in a candidate, and found them. Joker was the perfect hire; unfortunately, he was not the hero organization's perfect hire.

Simply put, look at Apple and Microsoft. They are both phenomenal companies to work at. However, would Jonathan Ive – who suggested glass iPhone screens and brushed aluminum MacBooks – have become a success at Microsoft? The man was offered knighthood, and that very man would have probably been given the boot at any other organization.

Heath Ledger as the 'Joker' in 'Dark Knight' (2008)

This is actually what we call treading the thin line between genius and madness, a tightrope that could pull any human to either side. Religious fanatics from the medieval era scorned scientists as madmen, people who went against the will of Gods; the world of today looks at them as visionaries, pioneers even. It is not an easy task, and sometimes we just need some help to gain that perspective.

So, ladies and gentlemen, what do you think can help with that perspective you seek? Your friendly neighborhood Psychometric Assessments. You have a better chance at dying in a crashing airplane, which by the way is the safest mode of transport, than going wrong with the Psychometrics of today. It is a superhero to pushing the right genius to the right place.



“ I am keenly aware that I benefit from a wonderful tradition in the UK of designing and making.

— JONATHAN IVE
Chief Design Officer, Apple Inc.

Insights into Psychometrics

Psychometrics in many ways is more than a matchmaker for people and jobs. Behavioral tendencies and even personality to a certain extent are a lot similar to instruction guides for people. Think about it, would anyone buy an expensive machine without its operating manual? Similarly, why would anyone want to hire someone new and not know how he or she worked?



**“ We know of what we are,
but not of what we may be.**

**— Ophelia from Hamlet by
William Shakespear**

Simple, correct? Wrong. People are not machines. They are complicated, twisted, diabolical, naïve, and many adjectives. For instance, it is obvious to expect every iPhone to work the same way. However, not every technician does. Not every data analyst analyzes data using one process. Humans are beautiful and flawed that way.

Now imagine stumbling across an employee you think is the perfect hire. Something about his or her work ethic simply lights a fire in your belly. Yet, your psychometric assessment decides to moodily state otherwise. Wait, what just happened? Only a page ago, we were all for Psychometric Assessments. Why the sudden doubt? Rest at ease, the following paragraphs exist to help understand this contradiction.

In easy to understand words, Psychometric testing is a very broad-spectrum approach to understanding the specific traits and skills of extremely complex people.

Bearing this reason in mind, Catherine Fitzsimons, HR director and founder of Fresh Thinking, stated,

“ This practice is unfair on jobseekers and the current workforce, even downright dangerous when unsuitable people end up in powerful roles due to psychometric testing.

Think about it; with a little research, it is easy to find multiple tests predicting future performance on arbitrarily chosen skills and competencies with no relevance to the job role. Precisely why hiring decisions go awry; why a great marketer ends up with a desk job working on codes.

Recently, a renowned organization in the IT industry tested their current workforce as part of their annual psychometric evaluation mandate. Unsurprisingly, a majority of the test-takers observed little change in their assessment results. Let us look at Mr. X's profile now.

	Profile	Assessment Result
	High Performer Well Respected Loyal	Failed

Mr. X was quite the superstar in the organization. He lived a high-performance life at work; backed by numbers, loved by his peers, respected by his juniors. Hardly an illusion, his success had reached an aspiration worthy level over the years. Did we mention it though? Mr. X failed his psychometric assessment for the organization.

Here was a man with proven performance, and a test that simply chose to ignore it. That is like calling Tiger Woods a bad golfer because he chose to cheat on his wife. Of course, the organization retained the man despite his results. However, Mr. X could have just as easily been a candidate without performance history, just as easily rejected.

Is the test you are using valid? Is the test you are using reliable? All very good questions. And at the risk of sounding hypocritical, yes, Psychometric Assessments is still a ship sailing between genius and greatness. However, for a ship to remain afloat, it needs architectural finesse – a feat impossible without experience, effort, time, blood, sweat, and tears. Okay, that escalated quickly.

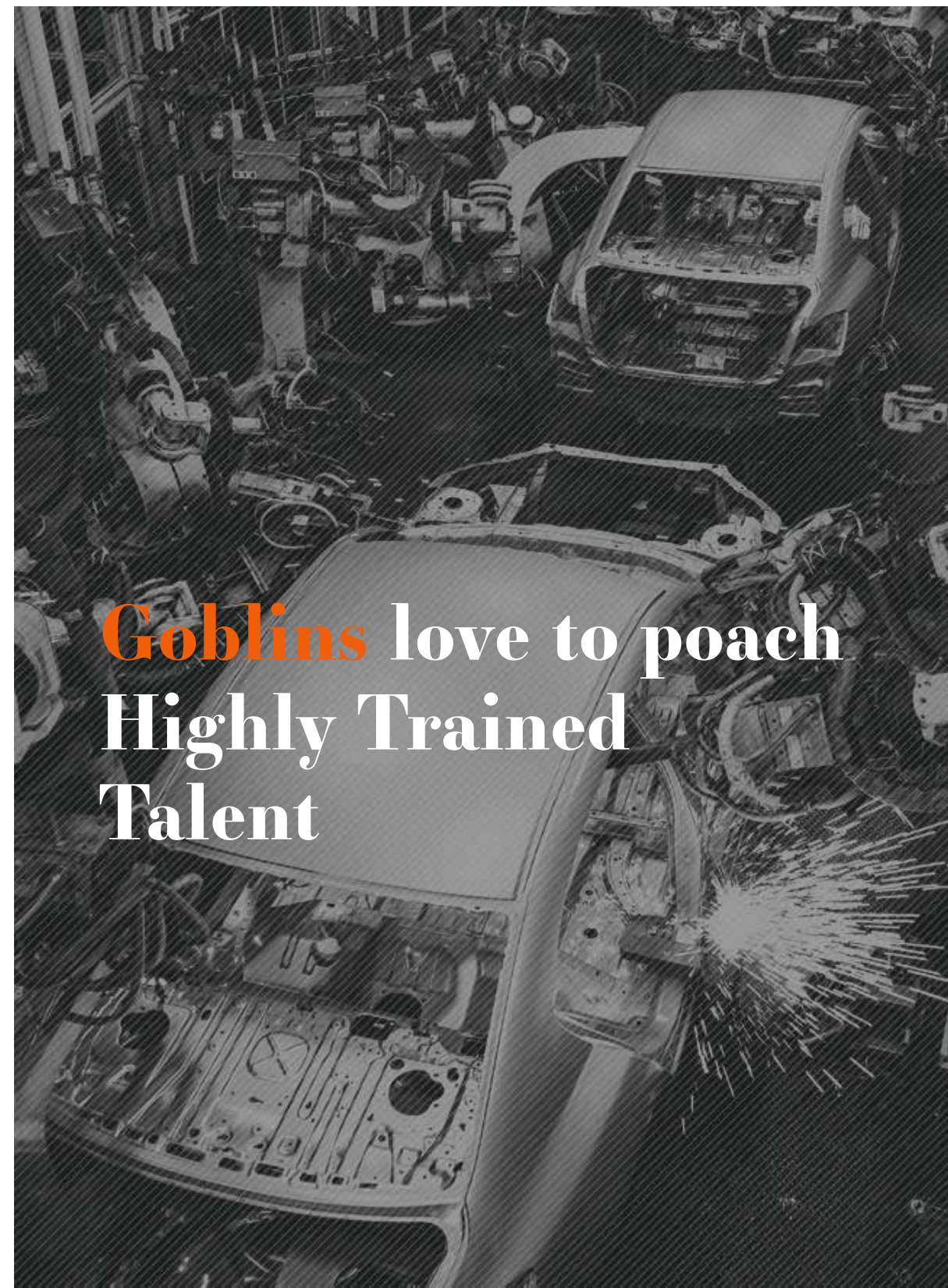
It is reasonable to believe Psychometrics a cheap imitation of the human instinct. Wrong. Then, how do people get out of the misery for being unable to find the perfect psychometric assessment?

Let us take a peek at what the ideal assessment looks like, if it even exists that is.

Draw from Case Studies

When we think ideal, we think perfect, maybe foolproof, maybe exhaustive abilities. It is an interesting word, certainly applicable to human beings as well. However, what is it you can call ideal with respect to assessments?

Case I: Attrition Goblin of the Automotive Industry



At Mettl, we understood “ideal” and the difference in sentiment it brought to different organisations. Take for example one of the biggest names in the Indian Automobile Manufacturing Space. On a yearly basis, they executed an entry-level hiring mandate for Graduate Engineering Trainees in sizeable proportions, countrywide, with a pool of candidates sourced from Tier-I to Tier-III colleges.

However, despite a stellar process, our client remained largely disappointed with heavy early-stage attrition. It affected more than just their new hires, cascading to poor implementation of companywide actions and plans. In addition, turnover surged to astronomical heights post the employee training period, which by the way was unprecedented among competitors in the automotive industry.

Obviously, the folks at Mettl needed to put on their best Sherlock Holmes hat to investigate the matter. Our research revealed that while the assessments deployed by the client organization accurately measured for technical competencies, they significantly fell short on cultural fitment. With the candidates’ behavioral competencies out of whack from the organization’s, a short employee life cycle emerged an unsurprising conclusion.

Preliminary investigation identified desirable competencies for a successful GET hire based on the client's competency skeleton and the Mettl competency library. Focus group discussions with the shareholders began to unveil a plan that allowed us visibility to set achievable goals.

With a custom assessment in place, administered to approximately 240 GETs, and post intensive hours of filtration and sorting, our Psychometric Research and Analysis team generated models for use in predicting the desired parameters.

Mettl's added suggestion in using aptitude and psychometric assessments allowed the organization to identify stable performers with the right competencies and proficiency accurately. Post-hiring, our client reported an overwhelming drop in attrition. The Y-o-Y change in retention in six months skyrocketed. Mettl Holmes had solved the case.

Case II: Pharma Giant- The Competency Framework



- However, even with such results, Mettl hit a temporary speed breaker when India's biggest pharmaceutical joint venture made an appearance. The organization wanted to ensure every hire emerged a top performer; the ask was simple – to convert their recruitment process into a competitive advantage.

Now, cultural fitment, as was our problem statement previously was key to this. However, the new challenge asked for more than that. Once an ideal solution, no longer viable –this is the mantra people in the assessment business need to digest.

The organization possessed its own competency framework – structured and well defined for optimum output if utilized to perfection. Mettl began by mapping their own extensive competency set with that of the organization's framework, a smart effort in itself. It ensured that the right candidates made it through to align with both the cultural and performance based criteria.

The comprehensive exercise made the pharmaceutical joint venture the first non-IT enterprise to roll out psychometric assessments across all job roles in the industry. Post the framework mapping, our suggestive solution pushed the perfect model assessment, benchmarking proficiency for competencies that actually affected on-job performance.

An online simulation was also thrown into the mix on our robust and secure platform to reap pristine accuracy with respect to the cut-offs for the competencies identified.

If the technical jargon is getting to you right about now, it is all right to detour to a more lighthearted version of the story. Think love. There is no such thing as the perfect man or woman, the one human being anyone could give anything to be with for all eternity. Is that not so?

“ If you’re looking for the perfect girl, go buy yourself a Barbie doll!

— **SOMEONE SMART**

Why do you think that is? Fifty years down your road to marriage, it is impossible to imagine having spent your life with anyone else. Perfect is impossible, but it is most definitely possible to find your perfect. Genius is situational; remember Apple superstar Jonathan Ive? An ideal assessment is just as situational. Come on, we would be run out of business if anyone managed to build a one-time godlike assessment that could solve all problems. Do not do that. We are good people who need business.

So, now that we have equated ideal to situational – wow, looks like we have been doing a lot of that lately – it is time to understand how the sanctity of assessments remain crystalline. All aboard the Measurements Train!

Measurement

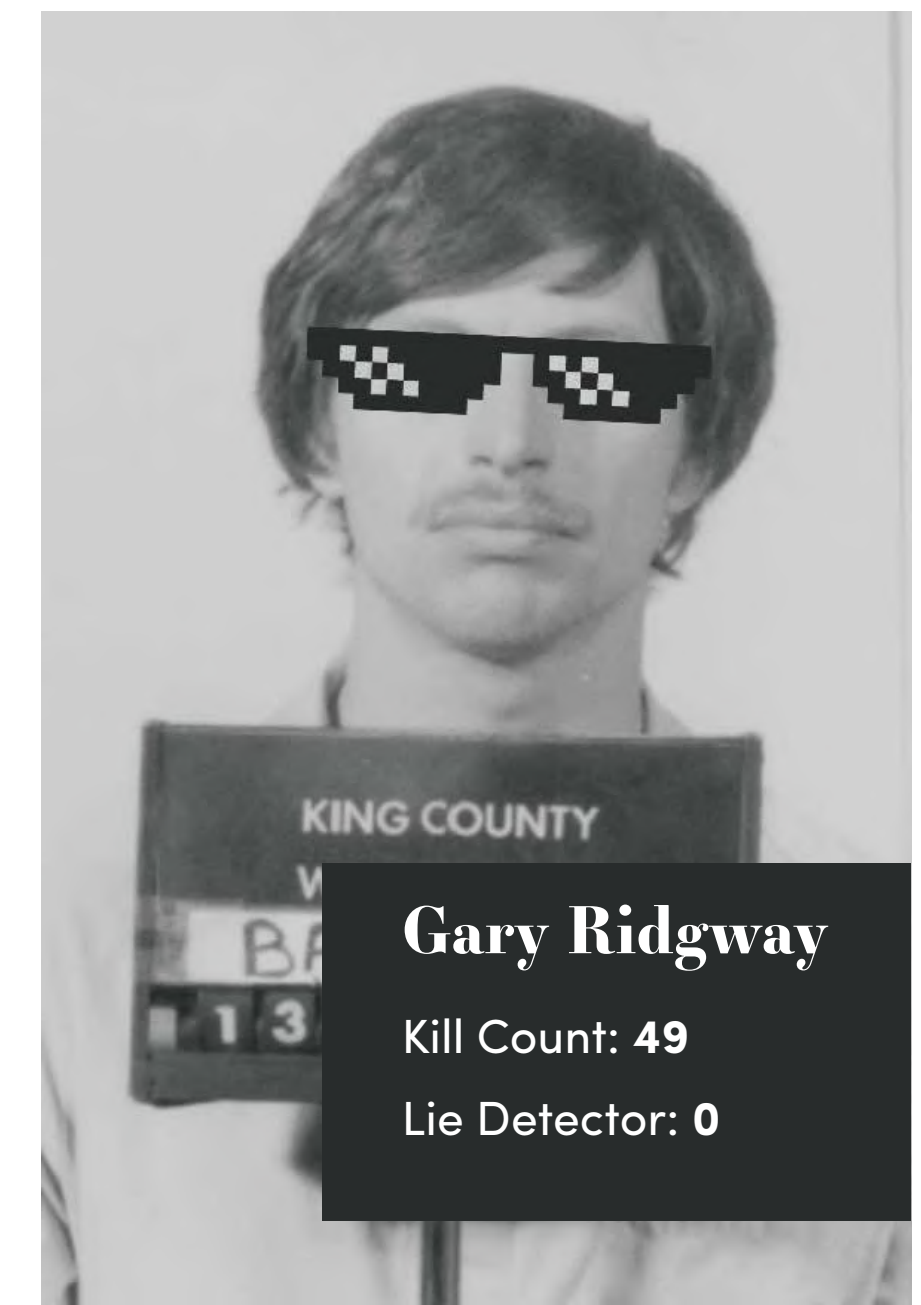
We talked a lot about Psychometrics. A rollercoaster of a ride between how it could be both the hero and the villain in assessments. What makes the difference though? There are metrics, obviously. Just as there are laws that put criminals behind bars, there are metrics that distinguish utterly pointless psychometric assessments from the good ones.

Branding also separates the horrible from the phenomenal. Look at Myers-Briggs Type Indicator or MBTI for short, a popular assessment with tons of cute features. You would think it an equally amazing test, right up there among the best of the best. Yet, modern day researchers equate it to being about as meaningless as the lie detector.

Oh, there is an interesting story behind that. In fact, the polygraph is at best a pseudo-science. Cases have seen truthful people fail the test simply because they were nervous, while serial killers such as Gary Ridgway and Charles Cullen among others beat the test simply because

of their calm demeanor. In fact, John Augustus Larson, the inventor of the polygraph, went on to regret inventing the machine after having witnessed law enforcement's unscientific use of it. We learn something new every day.

Just as with technology, assessments over the years have grown at a beastly rate. Apparently, technology is too cool to wait for us to catch up to it. In any science, it is essential to define standards to ensure our assumptions make sense, somewhat at least. What are those standards? The most common of those are validity, reliability, and norming. Let us look at those, shall we?



Gary Ridgway

Kill Count: 49

Lie Detector: 0

Reliability

A test is reliable as long as it produces the same results from different sources. If you think your arm is broken, it is obvious to feel more confident when multiple doctors diagnose a fracture. If one equates that to psychometrics, a reliable test would produce consistent results over time.

Honestly, would anyone trust a test that called someone an introvert the first time around and an extrovert a year later? No. Would you not expect a line that measured five centimeters on one scale to measure the same on a different one? The line is essentially the same, and only a good test can ensure it remains that way.

Over the years, scholars and researchers uncovered multiple ways to check for reliability. Of course, the methods would require a book of its own dedicated to them. Let us stay away from everything backend for now. With that out of the way, now you have a reliable assessment. Would this test by any chance clear the validity criterion as well?



Validity

Validity. Yes, a word most people would probably confuse with reliability. True, they more or less go hand in hand. Nevertheless, by definition, they are polar opposites. In simpler terms, a test is valid if it measures what it is designed to measure, i.e. how accurate is it to say that a higher test score indicates that a person is more likely a better performer.

It is understandable to expect a test used in organizations to shed light on how a candidate would perform in a particular job, around a certain group of people. With this in mind, it is essential to reiterate the difference between reliability and validity, with the former being a prerequisite to the latter.

For example, consider a car's fuel gauge, which systematically registers one-quarter higher than the actual level of fuel in the tank. Repeated readings under similar conditions would yield consistent, ergo reliable, measurements. However, this does not magically fix the faulty gauge.

By causation, if you associate reliable assessments to valid assessments, you would be stranded in the middle of nowhere with an empty fuel tank. Ouch. Not really a healthy place to be at in life, is it now? Gentlemen, ladies, so what we take away from this lesson is the priceless value of no compromise when it comes to psychometric assessments.

“ To mistrust science & deny the validity of scientific method is to resign your job as a human. You'd better go look for work as a plant or wild animal.

— P.J. O'ROURKE

Political Satirist and Journalist

Norming

Wait. This is amazing. You now have a test that is both beautifully reliable and valid. Nevertheless, what about the results? An assessment fails without quantifiable results, but as stated innumerably – human beings are far from quantifiable.

It is hard to put percentages to competencies such as ethical integrity or teamwork for that matter. Flawed and beautiful, remember? How then do we derive results that ascend a group of candidates from the other? Two words. Relative Grading.

However, even that is a delicate ball game. If you think about it, picking the relatively best apple from a batch of rotten apples would still yield a rotten apple. How then would you ensure good results from a good test? In psychometrics, to assess overall performance, researchers have employed standardization samples.

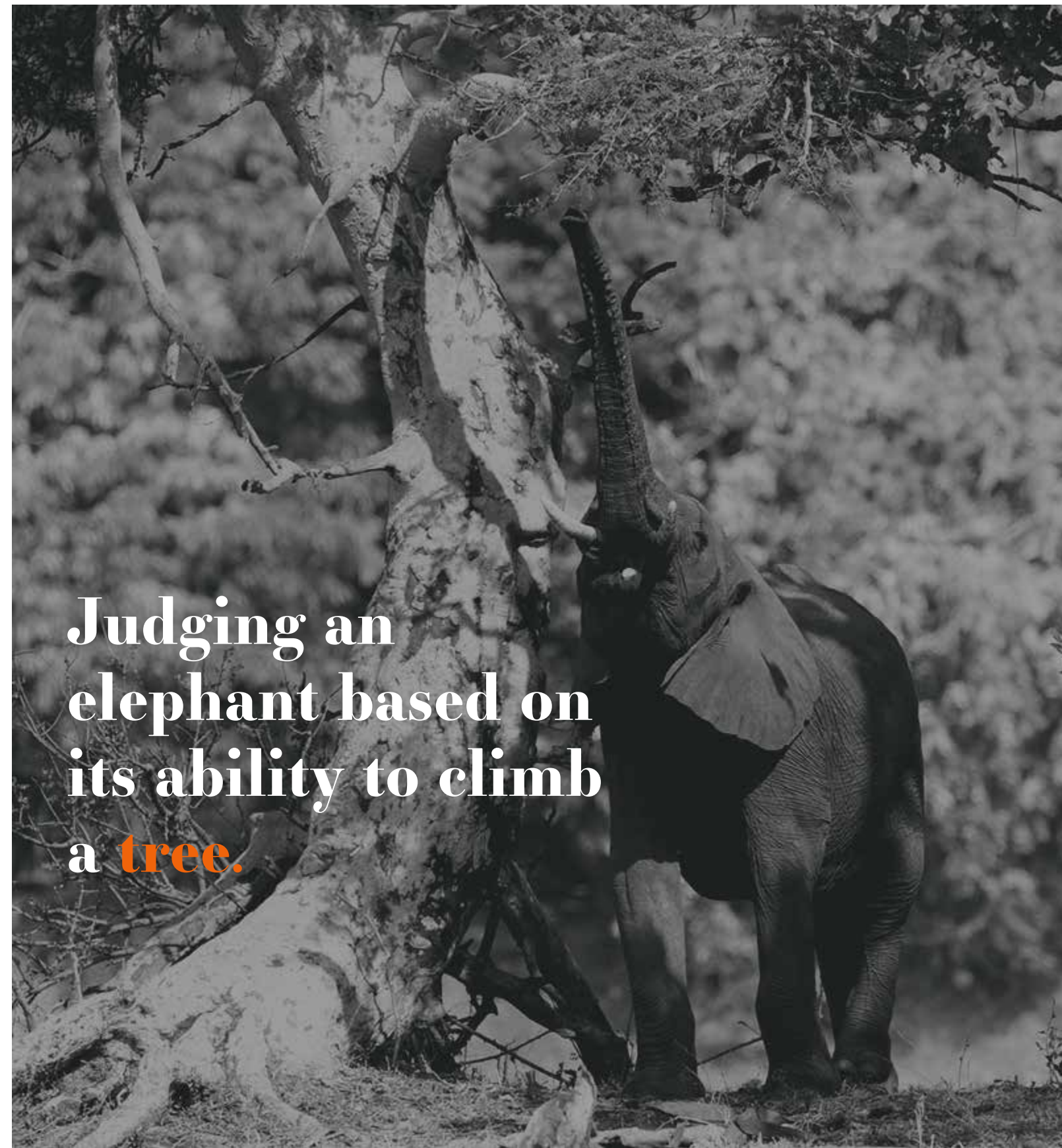
It is far from anything confusing; simply a large sample of test takers who represent the population for which the test is intended. The samples are obviously representative – meaning a children group when developing a test for children, and an adult group when developing a test for adults. Of course, samples for the sake of accuracy extends to geographical demographics as well.

By geographical demographics, we mean a group of Indians when assessing the sub-continent and the English in and around London. This can easily extend to race, sex and ethnicity for the highest levels of accuracy.

Easy as pie, right? When you score 94% on ethics, you now know that you are simply better than 94% of the sample group from whom the test makers derived the normal distribution. Oh, and just to keep things technical – the sample group is actually called the norm group. Again, we learn something new every day. Words to live by.

No road is easy. Challenges

Of course, while we did stress on genius and ideal being situational, genius is more of a gift as opposed to the effort that goes into making an ideal. Why is it an effort? Challenges. Nothing top-notch is ever easy to reach or achieve. Be it during production or post production. Not too long ago, we went on and on about the beauty in validity and reliability. That is a challenge by itself. Creating a test so reliable that it generates the same result under similar conditions, and validating it for its purpose. The very thought of it makes assessment creators worldwide sweat. Not an easy task. Trust us on that.



**Judging an
elephant based on
its ability to climb
a tree.**

What about post-post production then, when the test is out of your hands and into the world? Recruiters have used these assessments for job positions where personality attributes have little to contribute to in terms of performance. Misconception.

Then again, there is that issue about due-diligence. When people stop being due diligent. We get it. Making predictions is important. We want to predict the weather, sports, and even the stock exchange among others. To this end, the business world followed suit by using psychometric tests to predict individual behavior for hiring, promotions and employee development.

Use it. Find out everything you need to know, and verify it with your own judgment as well. Mano a Mano, right? Human to human. Your assessment is a tool to enhance your judgment, not control it.

These are, however, the bigger issues. Little things also creep up like weeds every

now and then. For example, assessing a non-English speaking native with an English test is obviously not doing anyone any good. Would an Englishman with zero understanding of Spanish like it if forced to watch a soap drama in the same language? No. Actually, maybe. But you get the point.

Digging any deeper is nitpicking; and overall – psychometrics remain a boon in any and all processes they are used for in the valid sense. Hiring, employee engagement, attrition, learning and development, they are all synonymous to war in the business world sometimes. Psychometric Assessments is a tool of likelihoods not 100% accuracy, and you are its wielder.

“ New eras don’t come about because of swords; they are created by the people who wield them.

— NOBUHIRO WATSUKI

the Author of Rurouni Kenshi

Parting Note

In an interesting and vast field such as psychometrics, it is very true that we managed to scratch only the absolute surface of the subject.

You may possess questions still needing an answer, or maybe you understood everything you needed to understand. That was the purpose, an easy guide for a busy mind.

It's essential to understand that the cost of a bad hire is equivalent to a year's CTC. A cultural misfit may very well tarnish a company's brand or image even. In the face of such odds, Psychometric Assessments emerge as the Excalibur to your organization's Aurthorian hands.

**“ The capacity to learn is a gift; the ability to learn is a skill;
the willingness to learn is a choice.**

— BRIAN HERBERT

You have the information. What are you going to do with that information? The ball is in your court. Godspeed, ladies and gentlemen.

Thank
You



ABOUT US

Mercer | Mettl is a SaaS based assessment platform that enables organizations to create customized assessments for use across the entire employee lifecycle, beginning with pre-hiring screening and candidate skills assessment, training and development programs for employees/students, certification exams, contests and more.

TRY FOR FREE



INDIA OFFICE

+91-9555114444

Plot 85, Sector 44, Gurgaon,
Haryana, India - 122003

US OFFICE

+1-650-614-1816

Mettl Technologies Inc. 113
Barksdale Professional Center,
Newark, Delaware 19711, USA

Australia: +61390699664

Indonesia: +6285574678938

Singapore: +6531386714

South Africa: +27875517192

UAE: +9718000320460

UK: +441422400843



contact@mettl.com

Be sure to carefully read and understand all of the disclaimers, limitations and restrictions before using the assessment services, reports, products, psychometric tools or the company systems or website. Read the complete disclaimer [here](#).



© 2019 Mercer Mettl All rights reserved.

