Hire like Google? For most companies, that's a bad idea

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Laszlo Bock, the head of human resources at Google, made quite a splash with his announcement last year that the technology firm has changed the way it hires people. Gone are the brainteaser-style interview questions that so many candidates abhorred. But also gone, it would seem, is any concern with discovering how smart applicants really are. "GPAs are worthless as a criteria for hiring, and test scores are worthless. ... We found that they don't predict anything," Bock told the New York Times.

Let's take Bock at his word and assume that the data-obsessed firm has crunched the numbers rigorously and found that the test scores of the people it hires really don't predict how well they perform once they are on the job. If Google ranked its new hires by their SAT scores, and found that those in the bottom 10 percent of the list performed just as well as those in the top 10 percent, would it mean that traditional measures of intelligence are useless in the business world?

Unfortunately for Bock and his admirers, who range from Thomas Friedman to Rush Limbaugh, the answer is no, and most other firms would be making a mistake to follow Google's lead.

Here's why. First, decades of quantitative research in the field of personnel psychology have shown that across fields of employment, measurements of "general cognitive ability" - which is another way of referring to the old-fashioned concept of intelligence or IQ - are consistently the best tools employers have to predict which new

employees will wind up with the highest performance evaluations or the best career paths. We shouldn't rush to assume that Google, with its private data, has suddenly refuted all that work.

How could Google be seeing no correlation between IQ and performance in their company? For the same reason that, say, there is no correlation between height and scoring in pro basketball. The average NBA player is almost 6 feet 7 inches tall, which is taller than 99 percent of the U.S. adult male population. The NBA selects its players based on height already, and it selects people who are outliers. Those NBA players facing one another are almost all extremely tall, which means factors other than height explain scoring. But put a team of NBA players up against a random bunch of guys, and height will make all the difference.

In the social sciences, this is known as the problem of "range restriction." When you measure people on a dimension (height) that doesn't vary much (in the NBA, almost everyone is very tall), that dimension will not explain much about how those people perform on another dimension (scoring). And Google's workforce is a textbook example of range restriction - not on height but on IQ.

Bock pointed out that the fraction of people at Google without a college degree has increased over time and is now as high as 14 percent on some product teams. This means, however, that more than 86 percent of people at Google do have a college education (or more), and most of them come from the most elite schools. As a former Google employee observed on Quora, there may even be a surplus of skill: "There are students from top 10 colleges who are providing tech support for Google's ads products, or manually taking down flagged content from YouTube."

These highly selective institutions have, by definition, already filtered students based on high school GPAs, SAT or ACT scores, and other

factors. Google in effect uses attendance at those colleges as a hiring criterion, so Bock - who happens to possess a degree from Yale University - is using GPAs and test scores whether he realizes it or not.

What about those Googlers without college degrees? It's true that, in the world of programming, a college degree is not a through ticket, but a clear demonstration of one's competence is. Facebook uses Kaggle Recruit - a competition to program solutions to real-world software problems - to find people for its data team. Microsoft ran Code4Bill (Gates), a talent search in India that assessed analytical skills and coding ability, and currently holds the Imagine Cup.

Google runs its own annual Code Jam, a worldwide programming competition in which anyone at any age can show he or she has talent. The event has been held since 2003, and in 2012 the winner was Jakub Pachocki of Poland, who defeated a pool of 35,000 competitors to become the champion, earning $10,000 and a likely job offer from Google. In an interview, Pachocki described the content of the competition as "more like mathematical work or solving logic puzzles." To win the Code Jam, then, you don't need a college degree, but you do need extraordinary cognitive ability. In that respect, Google's 14 percent may not be too different from its other 86 percent.

Researchers have long known that standardized tests - notwithstanding how they might be marketed or promoted - mainly measure general cognitive ability, and that general cognitive ability is highly predictive of educational and occupational success in the broad population. The small number of companies at the very top of their industries - like Google in technology - can afford to ignore or downplay these facts if they wish, because their candidates come preselected for high intelligence. For those companies, intelligence may not matter as much as leadership, creativity, conscientiousness, social skill and other virtues once an employee is on board.

The rest of the business world should not jump on Google's bandwagon. All those other qualities matter, and which are most important may vary by firm and line of work. But having an idea of how well a candidate thinks abstractly, solves novel problems and learns new things is important no matter what the job or situation. Those qualities are precisely what general cognitive ability is, regardless of how you label it. If you ignore intelligence when hiring, you do so at your peril.

More information: Christopher Chabris is a psychology professor at Union College and the co-author of "The Invisible Gorilla: How Our Intuitions Deceive Us." Jonathan Wai is a researcher at the Duke University Talent Identification Program and at Case Western Reserve University. They wrote this for the Los Angeles Times.