

YOU GOT SKILLS?



In 1995, a Pittsburgh man named McArthur Wheeler robbed two banks in broad daylight. Although he wore no mask and did nothing to conceal his identity, he was shocked when police arrived at his house with an arrest

warrant obtained using surveillance video. "But I wore the juice!" Wheeler complained.

He was referring to the lemon juice that he had put on his face prior to robbing the banks. Wheeler, who was not a bright man, had come to the conclusion that, if lemon juice could be used as invisible ink, rubbing it on his face would make him invisible to security cameras. Not surprisingly, he was quickly convicted and sent to jail.

Wheeler's story probably would have been forgotten by now if it hadn't been noticed by psychology researchers David Dunning, PhD, and Justin Kruger, PhD. They were so fascinated by his lack of insight that they began a study on incompetence. Their conclusion was that Wheeler was too incompetent to know he was incompetent and that this was actually a pretty common trait.

The study,¹ entitled "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments," describes a cognitive bias in which people with low ability or skills are delusional about their superior ability or skill. As Dunning describes it, "If you're incompetent, you can't know you're incompetent ... The skills you need to produce a right answer are exactly the skills you need to recognize what a right answer is."² This bias is described as the *Dunning-Kruger Effect*.

In the same vein, studies found that students who scored the lowest on tests had the greatest (exaggerated) estimation of their skills. But what was also interesting was that those who scored the highest had underestimated their performance relative to others. Those who are competent often (erroneously) presume others have the same level of skills.

At first, the Dunning-Kruger Effect was thought to apply only to people who are ignorant or have low IQs. But soon, other studies started to show that this cognitive bias was common across all walks of life and all levels of intelligence. In fact, people who are extremely skilled in one area can be more prone to the effect because their expertise blinds them from accepting their limitations in other areas—this could be a high-profile politician or a highly educated professional (these are random examples, of course).

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I'm sure we can all think of times when we have observed the Dunning-Kruger Effect. Personally, I don't see it as a psychological defect but as a product of human nature because we operate under assumptions. Given everything we see and do in a day, it would be impossible to stop and think through every decision or question every motive. Our brains make decisions quickly with the limited information available as a means of survival. If we are not careful, this functionality can also shape what we believe, with assumptions becoming truths that we accept and defend as reality.

As research papers go, Dunning and Kruger's may be one of the most insightful I have read. As someone who prides himself on innovating and challenging the status quo, I have found it very helpful to understand the Dunning-Kruger Effect, not as a way to dismiss those who disagree with me but as a means to question myself when disagreed with. It's about having the humility to realize how little we know. Note that you don't need to be an innovator to benefit from this exercise; society in general can do the same.

McArthur Wheeler may have suffered for his crime (apparently the lemon juice got in his eyes, making for a very uncomfortable robbery), but his pain provides us with a valuable lesson: Sometimes to know what you don't know, you just need to question what you do know. ■

1. Kruger J, Dunning D. Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments. *J Pers Soc Psychol*. 1999;77(6):1121-1134.
2. Dunning D. *Self-insight: Roadblocks and Detours on the Path to Knowing Thyself*. New York: Psychology Press; 2005.

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