There Is an Equation for Happiness

Math may not make you happy, but it can accurately predict the things that do, according to a new study. Researchers at University College London had 26 participants complete decision-making tasks in which their choices led to either monetary gains or losses. The investigators used functional magnetic resonance imaging (fMRI) to measure the subjects' brain activity and asked them repeatedly, "How happy are you now?" Based on the data from the first experiment, they created a mathematical model that linked recent rewards and expectations to self-reported happiness.

Then, in a study published in the Proceedings of the National Academy of Sciences, the researchers tested the model by asking 18,420 people to play a smartphone game called the Great Brain Experiment for points. They found that their equation was accurate at predicting the gamers' happiness over their performance, too.

The investigators were not surprised by the degree to which rewards influence happiness, but they were surprised by how much mere expectations of happiness could. The findings support the theory that if you have low expectations, you can never be disappointed, but they also show that the positive expectation you have for something—like going to your favorite restaurant—is a large part of what develops into happiness.

The implications of the work are significant. Having a reliable standard by which to measure how people respond to gains and losses could make mood disorders easier to understand—and, by implication, to treat.

Full of Yourself And you know it, clap your hands.

Can Narcissists Be Self-Aware?

Narcissists have gotten a bad rap. Sure, they're preening, entitled, aggressive, greedy, unfaithful, dishonest and sexually exploitative. But one thing they're not, it turns out, is dishonest about themselves.

Narcissism is known as an egosyntonic condition, which means sufferers see nothing inappropriate about their behavior. But a team headed by psychologist Sara Konrath of the University of Michigan found that one way to identify a narcissist was simply to ask one carefully phrased question—"To what extent do you agree with this statement: 'I am a narcissist.' (Note: The word 'narcissist' means egotistical, self-focused, and vain.)" The parenthetical was included to ensure that all participants were working from the same definition. They were then asked to rate themselves on a 1 to 7 scale, with 1 meaning "not very true of me" and 7 meaning "very true of me."

To a remarkable extent, the scores on this single-question screen correlated with the subjects' scores on the more complex, 40-question Narcissistic Personality Inventory. The reason narcissists are so honest is that sometimes their pathology is paying dividends. "Narcissists have great mental health outcomes," says Konrath "If you're trying to think of a group of people low in depression and anxiety, high in creativity and accomplishment, that's narcissists."

That doesn't sound bad. But narcissists possess those qualities to the general exclusion of others, such as interpersonal skills. That means it all comes crashing down eventually—which makes it awfully handy to be able to identify them with a single question.