

Freakonomics Goes to School and Teaches Us the Right Way to Bribe Kids

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The case for putting \$20 bills on the desk of every standardized test taker



Reuters

A brand new study by Steven D. Levitt (of *Freakonomics* fame), John A. List, Susanne Neckermann, and Sally Sadoff finds that Chicago students in low-performing schools did better on tests when they were promised money or trophies for their good grades. But it wasn't as simple as writing a bunch of checks and waiting for the A's to pour in. How much money and how you present the rewards makes all the differences.

Without instant money and rewards, many students in these Chicago schools had put forth "low effort on the standardized tests that we study," the authors write. Why didn't the students care about good grades? It's all about the timing of our rewards.

Let's imagine a man bursts through your nearest door in five seconds and says: "Quick, do 20 push-ups and I'll send you a check for \$20." Will you ask how long it will take for the money to arrive?

Classical economics would suggest you shouldn't. All things equal, \$20 today is worth \$20 in a week or so. But in fact, we're much more likely to do things -- large and small, easy and difficult -- when we can see the immediate benefits. If I hold a \$20 bill in front your face, you're more likely to finish a push-up set than if I promise you'll get the money wired to you in a month.

Behavioral economists call this sort of thing "hyperbolic discounting," an ungainly phrase that's more commonly known as the problem of delayed gratification, or procrastination, or inattention. The theory says that we don't value rewards properly. We excessively (or *hyperbolically*) low-ball (or *discount*) the value of rewards in the distant future, which means we put too much weight on short-term satisfaction.

Now back to the tests. When an adult tells a child "stay in school," he can point to his big salary and home as evidence that education pays off. But education doesn't literally pay off for a very long time. Its rewards are delayed; therefore, from the perspective of a student, they are easily ignored. The economic rationale for paying students for good grades isn't (just) bribery. It's also about bringing the reward of good grades closer to the event of the test, when the student is more likely to act on it -- and less likely to "discount" it.

In this study, economists offered students of different ages money or trophies just before they took a test. Sometimes, the students got the reward first with the possibility that it could be revoked for bad performance. Sometimes, the students were only shown the reward after. So what did the economists find? Four really cool things.

First, they found that money works, and the amount of money really matters. Students were reportedly willing to exert significantly more energy at \$80-an-hour, but not at \$40-an-hour. (Authors: "As far as we know, ours is the first study to demonstrate that student responsiveness to incentives is sensitive to the size of the reward.").

Second, they learned that the rewards were most powerful when they were framed as losses rather than gains (i.e.: "Here is \$20. If you fail, I'm taking it away.") The technical term for this is loss aversion and it's endemic. We're more protective of money we have -- or think we have -- than we are aggressive about seeking money we don't have. Third, they learned that "non-financial incentives," like trophies, worked best with young people. Fourth, they learned that rewards provided with a delay -- "we'll get you that check in a month!" -- did very little to improve performance. The power of hyperbolic discounting is strong with these ones.

We don't always think of our attention as part of a budget, but it is. When we pay attention, we pay, literally. We allocate time out of a relatively finite portfolio of focus to concentrate on something we think is important or alluring.

The trouble for many schools is that the incentive structure is set up so that teachers focus more than their students on standardized tests. These tests are super-high-stakes for instructors and principals, where they can determine who keeps a job and where state resources are spent. But they are relatively low-stakes for individual students in the short-term, especially if those students aren't looking to go to college and don't care very much about a weak grade. This paper's clever conclusion is that we can manipulate lessons from economics and psychology to trick/bribe/nudge students toward spending more from their attention budget on these tests.

We talk about the "attention economy" as if it's confined to the world of social media and advertising. But in fact, it's here, in under-served school districts, where the lessons of attention might be the most lucrative for the country. If we can buy their attention today, we'll all be richer for it.

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