

Marc Lewis Ph.D.

Delay Discounting

Overvaluing immediate goals is the greatest impediment to trusting the future.

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Source:

Delay discounting (DD) is the tendency to devalue long-term rewards in favor of immediate rewards. It has been studied extensively in the fields of psychology and behavioral economics. DD is a particular cognitive bias: the reward you expect to get now, or in the near future, seems worth more than the reward that's expected in a few hours, days, or weeks, even though its objective value is clearly lower. The future reward is "discounted." The famous marshmallow test, devised by Walter Mischel in the 60s and 70s, is a paradigmatic example. Little kids are promised two marshmallows if they wait for a few minutes, or else they can have one marshmallow right now. Three-year olds often go for the immediate treat, while older kids are able to wait. [This YouTube video](#) is a delightful depiction. But it's not only little kids who have trouble waiting. Delay discounting affects decision making throughout the life-span. It can even be observed in other species, including birds.

Source:

DD shows individual differences, not just developmental differences. [People with ADHD](#) are particularly fallible. Perhaps that's understandable, since they have difficulties with cognitive control in general. But, addicts are the worst-case scenario: the thought of a few lines of cocaine this afternoon or an evening at the casino is so attractive that it outweighs the far greater benefit of having some money in the bank tomorrow. The thought of a couple of drinks on the way home greatly outshines the attraction of a happy marriage in the coming week. A three-scoop sundae for a midday snack...well, you get the idea.

What is it about the immediate that makes it outshine the future? For one thing, the immediate seems more certain than the future. It's hard to predict the future accurately.

But that doesn't explain why some people -- addicts in particular -- find it *so much* more challenging than others. To get to that explanation, we need to look at the role of dopamine in attraction and impulse.

Dopamine's job is to rivet attention to immediate goals and generate the motivation for pursuing them. Dozens of studies show greatly increased dopamine uptake (e.g., from the midbrain to the nucleus accumbens) when addicts encounter cues associated with their addiction. This is a kind of hyper-conditioning. It narrows attention and desire—or craving, simply put—to the substance or behavior that has become the only game in town. Nothing else looks as good, nothing else is nearly as attractive, because that *thing* triggers more dopamine release than all other goals combined.

The only antidote for this kind of delay discounting—the kind that's at the heart of addiction—may be what George Ainslie calls an *intertemporal dialogue*—having a dialogue between your present self and your future self. In this kind of internal dialogue, your future self takes your present self in hand and says, trust me—things will soon get better. Stick it out...with me. According to Ainslie, that's how people build willpower, from the bottom up.

Self-trust is hard for addicts to find, but not impossible. Even a few days of abstinence can be enough to start the ball rolling. Finding just a small kernel of self-trust can serve as a pivot point. From that moment on, life can start to swing around, and it can get easier and easier to trust yourself because you've caught a glimpse of the self you can be, the self you can rely on. Empowerment techniques, mindfulness techniques, and motivational interviewing are a few of the more recent treatment methods that can help addicts turn the tables and move on. But you don't have to wait for someone to hold your hand. There's a self right there, right inside you, right now, that can take care of you...if you let it.