Is There a Secret to Willpower?

Have you ever wondered what is wrong with you? Do you agonize over why you can't stay on a diet or keep from regaining weight you have lost? Do you blame yourself and your lack of willpower? Did you ever think that it just might **not** be your fault? Scientific experiments have finally begun to uncover the secret behind your resolve.

Per Doug Lisle, PhD, "We can put a man on the moon and bring him back again but we struggle with self regulation, both individually and collectively." Until recently, willpower has been an elusive concept. Many have wondered, is it a skill, is it energy, is it a set of knowledge, or is it a self disciplinary process? Sigmund Freud put forth the model of the id and the ego. The id is our immature, pleasure-seeking self that wants what it wants when it wants it. It is like a wild horse. Then there is our ego, the horse rider, the mature one that tries to manage the wants and behavior of the id. According to Freud, our willpower is our ongoing effort to manage our id.

When making decisions, we were designed to balance short-term desires against long-term costs. In today's world however, when our food is supersaturated with fat, sugar, and salt, this beautifully integrated decision-making system is hijacked by super normal stimuli that drive the pleasure-seeking areas of our brain crazy and that result in us making the wrong decision. We may repeatedly and knowingly jeopardize our long-term health in order to indulge in these short-term pleasures. This super normal stimulating food is not part of nature and it disrupts the balance that would normally generate the right choices.

Willpower is trying to make the right long-term decision when there are short-term enticements.

In the late 1990s, experimental social psychologist Professor Roy Baumeister now at Florida State University and previously at Case Western, set out to create a coherent understanding of willpower. He conducted a series of experiments that led to a revolutionary finding. These studies were: the cookie study, the Mardi Gras study, the lemonade study, and the prison study.

In this first study, the cookie study, Professor Baumeister wanted to determine if overriding temptation was costly and if people's tenacity became exhausted when put under stress. He baked chocolate chip cookies in the lab where the study was to be conducted. Study participants were told not to eat for three hours prior to the experiment. Upon arriving, they were split into three groups, two experimental and one control. The experimental groups were placed in the area where the chocolate chip cookies had been baked. The first experimental group was told that they were going to eat chocolate chip cookies. The second experimental group was told that they would be eating radishes. This step in the study was designed to stress the radish group by letting them smell cookies, but restricting them to eat only radishes. They needed to continuously override the temptation to eat cookies after being told to eat the radishes. The control group was kept in a separate room and was given magazines to look at.

Then, all subjects were given unsolvable, but seemingly solvable, puzzles and were told to ring a bell when they were done with the puzzles or when they gave up trying to solve them. The chocolate

chip and the magazine groups worked for 20 minutes before giving up on the puzzles. The radish group lasted only eight minutes.

Baumeister concluded that smelling the delectable cookies but being forced to eat the radishes had depleted that group's egos, their willpower to persevere.

Several years later, with the Mardi Gras study, Baumeister hoped to determine if we are able to store up pleasure in order to withstand self-denial better later. The first stage involved mentally stressing the subjects. Some were asked to watch a video of a woman speaking while words flashed on the bottom of the screen. Participants were told not to look at the words and if they did, to immediately focus back on the woman talking. In another group, they were asked to quickly choose the color word whose font matched the color of the word among other colors words whose font did not match with the words. Having to make these discriminations quickly also provided the desired stress.

In the second stage of the Mardi Gras study, 1/3 of the participants were given a delicious milkshake, 1/3 were given what looked like a milkshake but tasted awful, and 1/3 were given magazines to review.

Then they were all asked to solve the unsolvable puzzles. How did each group do? The researchers expected the group that experienced the pleasurable milk shake to do better than the other two groups. However, that is not what they found. Both milkshake groups did well while the magazine group did poorly. Baumeister concluded that it was the calories, not the pleasure derived from the milkshake, that enabled both milkshake groups to do well since the second milkshake group clearly derived no pleasure from a drink that tasted so bad.

The next study mentally stressed the subjects, then gave them either lemonade made with sugar, lemonade made with an artificial sweetener, or magazines to read. The group given the sugar lemonade labored longer on the unsolvable puzzles whereas the other two groups did not. Baumeister determined that it was glucose that determined how long the test subjects were willing and able to work before becoming exhausted.

Our brains only comprise 2% of our body weight, but consume 20% of our calories, and our brains prefer glucose. Our blood sugar levels drop within a matter of minutes when we are mentally stressed.

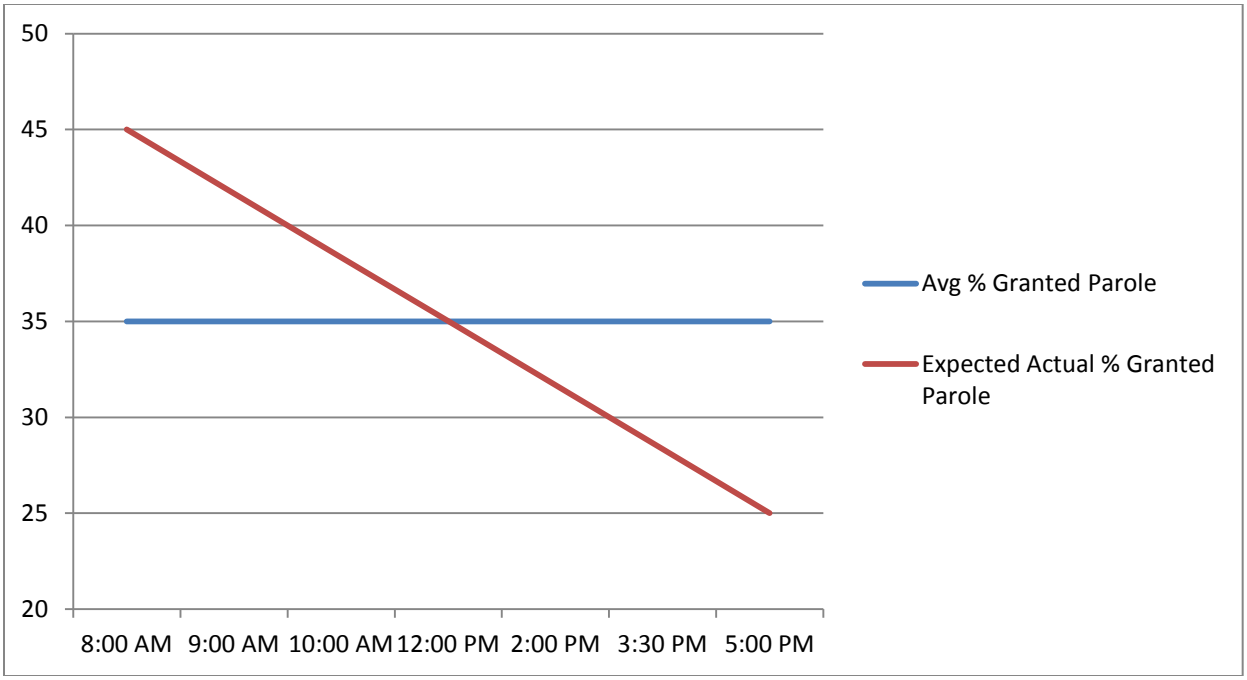
Holly Miller, a graduate student at the University of Kentucky, replicated the study using dogs in an effort to determine if the human id and ego played any role in willpower or if it was simply the existence or lack of glucose.

To mentally stress the dogs, she told the experimental group of dogs to "stay". The dogs were conflicted because they wanted to play with Holly and with each other. The control group consisted of dogs in crates. They weren't conflicted because they didn't have any choice. They were confined whether they wanted to be or not and didn't need to wrestle with the idea of disobeying Holly to pursue their short-term desire, to play with Holly and with the other dogs. In the second stage of the experiment, she gave both the experimental and the control groups dog toys with treats inside of

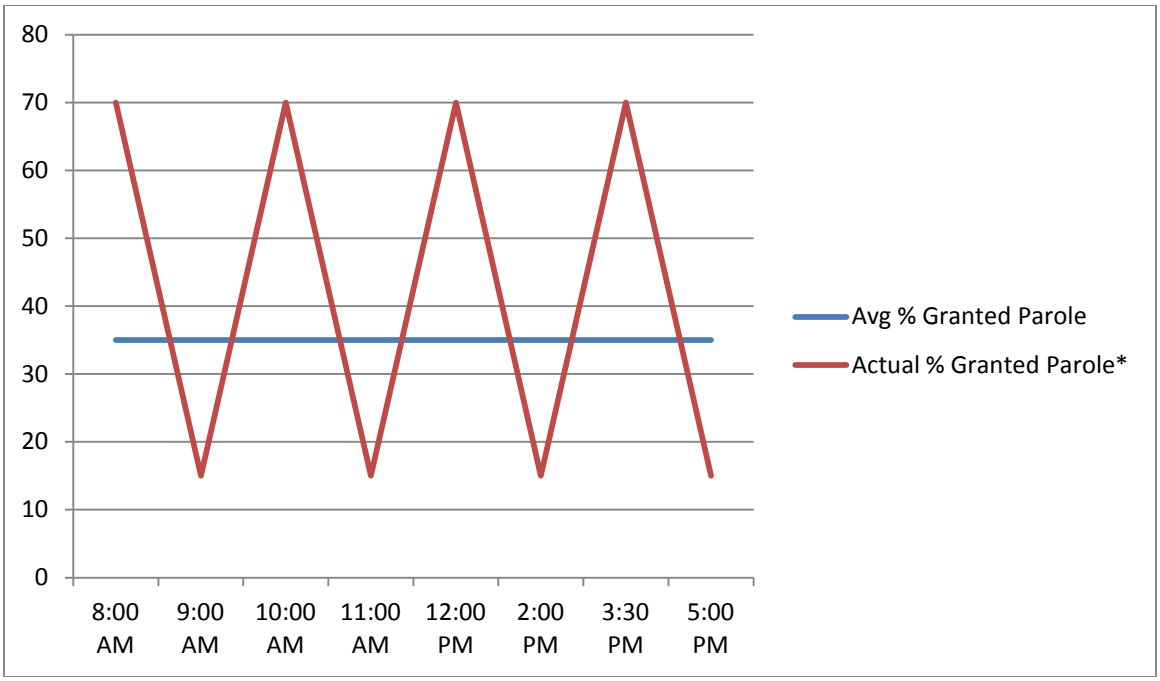
them. The toys are normally designed to challenge the dog to get the treats from them. However, these toys were rigged so that it was impossible to access the treats. The dogs kept in crates tried to access the treats longer than the dogs forced to "stay". Then both groups of dogs were given a sugary drink which resulted in both groups trying longer. Ms. Miller determined that human id and ego had nothing to do with the tenacity seen in Baumeister's experiments. The results were driven entirely by the glucose.

The power in willpower is simply glucose! When fighting temptation, we are actually depleting our glucose, aka our willpower. The implications of this finding are far reaching.

In the last study in 2011, a parole board in Israel was analyzed. On average, 35% of inmates are granted parole. Parole hearings are randomly scheduled throughout the day so criminals convicted of serious and petty crimes are intermingled in no specific order or pattern. The investigators expected to see the following pattern of those granted parole. They assumed that the parole board would grant a higher number of inmates parole at the beginning of the day when they were fresh and slowly decrease the number as they became more exhausted as the day went on.



Surprisingly and to the dismay of the researchers, this is not what they found.



* Actual data points were not provided during Dr. Lisle's lecture. The actual % Granted Parole is a dramatization of the results as described by Dr. Lisle.

The judges' decisions were strikingly different immediately after they had eaten breakfast, a mid-morning snack, lunch, or an afternoon snack. These wild swings shocked and troubled those conducting the study.

Unfortunately, this is not an isolated instance. This may very well be happening in other areas such as medicine, government, corporate America, and in our personal lives. Dr. Lisle equates long work days to supernormal stimuli that we are not designed to face.

So Dr. Lisle recommends the following guidelines to make the most of the willpower that we have:

1. Adopt a low-fat, whole food, plant-based lifestyle. This lifestyle provides us with the densest nourishment and enables us to most effectively metabolize the glucose that drives our decisions.
2. Clean your room. Physical clutter actually clutters and frustrates our mind as it is trying to focus on prioritizing the needs of the day. By creating an organized, clutter-free environment, you calm your mind and enable it to focus more clearly on the demands of the day.
3. Lay out your exercise clothes the night before. Moderate, daily exercise helps to increase your willpower but researchers aren't absolutely sure why. They believe exercise may lead to better glucose metabolism and a more fit person overall. Laying out your clothes in your otherwise spotless, clutter-free room creates an eyesore that actually helps to push you into exercising!
4. Get to bed on time. When sleep deprived, people tend to be more impulsive and tend to prop themselves up with caffeine and unhealthy food.

5. If you feel temptation tugging at you, eat something healthy first! Decide to put off the decision to indulge. You may find afterward that you are better able to say no.
6. Agree that no family arguments can take place until everyone has eaten a healthy meal.
7. Protect the willpower that you have by continuously "weeding your garden". The "weeds in your garden" are the temptations that tug at your willpower. They permeate today's society. It may be donuts for some, potato chips for others. Don't create a test of your willpower if you don't have to by keeping these weeds around. When you indulge, the junk that you just ate becomes part of your vivid imagery which will be very potent in your memory for the next few days, and it will take more of an effort to avoid it. Be very mindful of your vulnerability and after 3-4 days, its hold on you will begin to fade. The more you practice this mental hygiene, the better you will get. In fact, those that appear to have the most willpower are the ones that keep themselves in situations where they don't actually need to use it. Their life is in order. Their garden is weeded.

This fascinating research is humorously articulated by Dr. Lisle in his lecture The Willpower Paradox.