



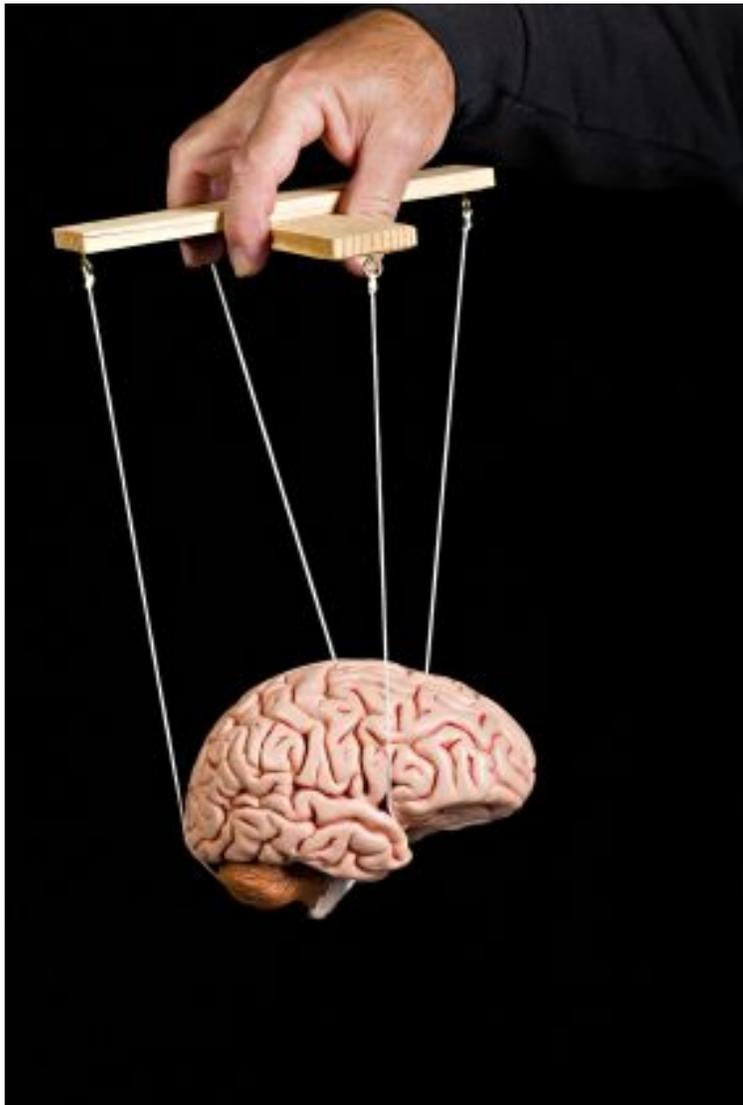
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The Gravity of Weight

String Theory: Attach Incentives to Assist in Weight Control

Generating motivation to lose weight and maintain the loss.



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Since weight loss and maintenance of that loss require constant surveillance, most people need all the help they can to stay on track. Not only must they have a sense of self-efficacy, i.e., that they can be successful in accomplishing their goals, but they must be motivated to initiate and follow through with healthy lifestyle changes that may need to be continued indefinitely.

Motivation can be either *internal*, (called “self-motivation” or “autonomous” motivation), such as developing a sense of mastery or competence for its own intrinsic sake, or *external*, such as arising from a desire to gain (or avoid) some reward or punishment. This reward (or punishment) can be either quite concrete, such as money, or more abstract, such as gaining someone’s praise and respect (or disapproval.) External motivation is the basis of the popular NBC television show, *The Biggest Loser*, now in Season 13 and paying over \$250,000 to the grand prize winner this year. Here incentives may include fame and fortune, but also the pride and praise involved in winning competition with others and or even avoiding

considerable humiliation and public embarrassment. In general, internal motivation leads to a sense that one's behavior is more under his or her own control, rather than contingent on external factors.

In her new book, *Strings Attached: Untangling the Ethics of Incentives*, Ruth W. Grant speaks of incentives in the field of behavioral psychology as a “particular kind of motivation—an extrinsic prompt, deliberately designed to elicit a desired behavior...” In other words, incentives used in this context mean “how to get people to act in accordance with their true interests, when their settled habits tend in the opposite direction.” Grant further differentiates legitimate from illegitimate incentives; for example, incentives can be “irresistible” or “coercive” such as when a person does not really have a free choice or the incentives are not voluntary. Incentives should “maximize choice” and provide “tangible benefits.” When assessing an incentive, Grant says, we have to consider what the “reason for the incentive” is, i.e., whether there is “undue inducement.”



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Incentives, though, can backfire: once there is no longer an incentive, one's motivation can stop as well. In other words, incentives work in the short-term. Grant makes the point that incentives have to be transformed into “habitual behavior and become part of accepted expectations” for them to have long-term impact. Further, incentives can send a message that we don't expect much from a person--that we have generally low expectations for that person to have self-directed behavior. And says Grant, “Why we do things impacts how well we do them.” Grant also makes the point that

incentives don't “address the root causes of the problem” and hence are “often limited as a tool for long-term improvements.” Further, incentives, though, must have meaning and value to a person. If they don't work effectively, it is possible that they were not significant enough for that person.

John and colleagues, in a recent article in the journal *Preventive Medicine*, describe two types of monetary incentive systems for use in those who want to lose weight. The first, the deposit contract incentive system, has participants put their own money down to motivate them to lose weight; they will forfeit their own money if they fail to meet specific weight loss goals over time. Here, two principles are involved: over-optimism, or a belief people have that they can achieve their goals, and loss aversion, or people's unwillingness to lose their own money.

The second monetary incentive system is the lottery-based system, whereby people receive someone else's money (e.g. NBC sponsors of TV's *The Biggest Loser*) if they achieve their weight loss goals. John and colleagues found that both systems can produce weight loss, but there was “substantial” weight regain

once the incentives were removed. What these researchers found, though, was that a pure loss is worse for most people than the idea of losing a deposit of their own money. The “peanuts effect” is the failure to appreciate that small deposits add up over time. In other words, aggregating all the small deposits that people stand to lose may motivate them to lose weight. The researchers also conclude that one size does not fit all: incentive programs may work best when they are “customized” to individuals. They also suggest that making a large first deposit may have greater consequences and contribute to continued larger deposits over time and they even suggest that some people may do well to switch from one form of incentive plan to another.

Bottom line: incentives may have a place in weight control in the short-term but they work best when they are individualized and when they lead people to develop intrinsic motivation and long-term changes in behavior. Otherwise, their effects may be short-lived.



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In Print: *The Gravity of Weight: A Clinical Guide to Weight Loss and Maintenance*

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