

# The Effects of External Rewards on Intrinsic Motivation - Practical Applications



Researched and Composed by Gabriel "Venom" Wilson, BSc. (Hons), CSCS.

## Abstract

[Part 1](#) of this series investigated the effects of various rewards on intrinsic motivation. Results indicated that various kinds of rewards can seriously undermine intrinsic motivation. However, the degree of this effect is entirely dependent on the reward and delivery. The purpose of this paper was to give various practical applications on rewards and how to properly administrate them.

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## Overview of The Effects of External Rewards on Intrinsic Motivation

Before discussing how to use rewards, we need to review several terms discussed in article 1.

### Intrinsic & Extrinsic Motivation

*Intrinsic motivation* can be defined as an individuals need to feel competency and pride in something (McCullagh, 2005). Therefore, athletes who are intrinsically motivated participate in sports for no apparent reward other than the satisfaction and pleasure they get from the activity itself. While *extrinsic motivation* can be defined as performance of an activity in order to attain some separate outcome (Ryan & Deci, 2000). Therefore, athletes that are extrinsically motivated participate in sport for external causes such as rewards, positive feedback, recognition, etc.; rather than for the inherent satisfaction of performing the activity itself (intrinsic motivation).

Results indicate that individuals who are intrinsically motivated (and or have the two forms of autonomous extrinsic motivation), compared to those who are controlled by

others to perform an activity (extrinsically motivated) have more interest, excitement, fun, and confidence, which leads to enhanced performance, creativity, persistence, vigor, general well-being, and self-esteem, among other benefits (Ryan & Deci, 2000). Therefore, ways to enhance intrinsic motivation are of the utmost importance for athletes.

## Rewards

Based on his research, the current author suggests that a reward can be defined as an external agent administered when a desired act or task is performed, that has controlling and informational properties. While rewards are typically delivered to increase the probability of a response, they can increase or decrease the probability of an event occurring, depending on the saliency and direction of the controlling and informational aspects of the reward. Saliency would refer to the intensity of either the controlling or informational aspect of the reward. It is what stands out to you the most. While direction would refer to whether the reward is perceived as increasing or decreasing the athlete's control; and whether the information is perceived as positive (increasing the athlete's competency) or negative (decreasing the athlete's competency). Rewards can come in the form of verbal rewards (i.e. telling someone "good job!"), physical rewards (i.e. a pat on the back), or tangible rewards (i.e. giving someone money, food, or a medallion), among others. There are 5 basic types of rewards discussed in the literature as follows (Deci, Koestner, & Ryan, 1999):

- Task-Non contingent rewards
- Engagement contingent rewards
- Completion contingent rewards
- Performance contingent rewards
- Unexpected rewards

*Task-Non contingent rewards* are rewards given for just showing up for the study. In an experiment, a participant may be paid to just show up for the experiment, but they are not required to do anything. They could just sit around the entire time.

*Engagement contingent rewards* are rewards given for just participating in an activity, and not necessarily completing it. For example, an experimenter may pay a participant just to participate in an activity that involves making a puzzle, but they do not have to complete or perform well on the puzzle.

*Completion contingent rewards* are rewards given for completing a task.

*Performance contingent rewards* are rewards given for performance, usually based on a normative value. For example, doing better than 80% of the participants in the study. A sub category of performance contingent rewards are *competitively contingent rewards*. They involve rewarding individuals for defeating others.

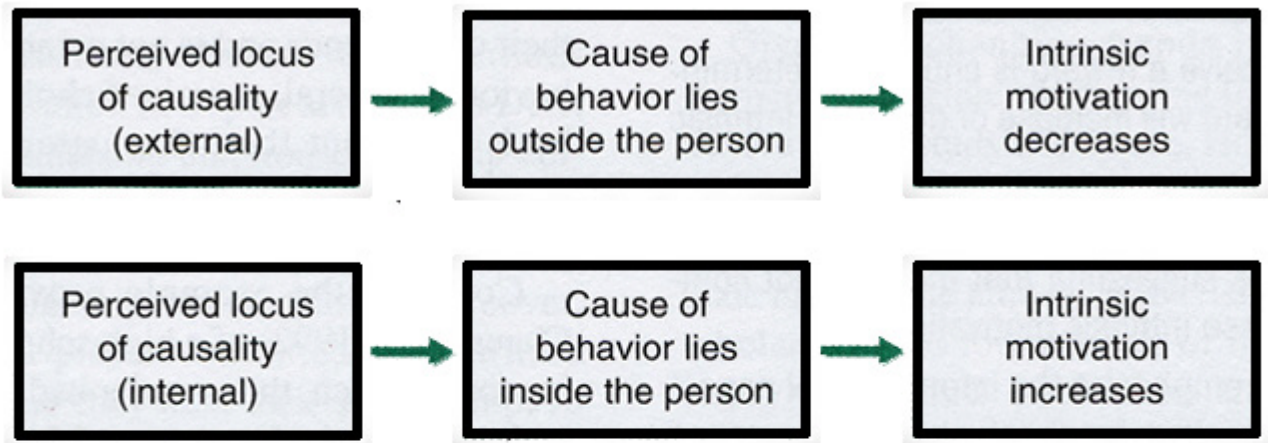
*Unexpected rewards* occur when participants receive a reward after performing a certain behavior, but were not expecting to receive a reward.

## Cognitive Evaluation Theory

The dominant theory on the effects of external rewards on intrinsic motivation is Cognitive Evaluation Theory (CET).

CET focuses on factors which can increase or decrease intrinsic motivation. In essence, this theory suggests that rewards have two basic properties that can influence intrinsic motivation: *information* and *control*. And these properties can increase or decrease intrinsic motivation depending on how they effect an individuals self determination and competency.

### a Controlling aspect of a reward



### b Informational aspect of a reward



Adapted from Weinberg and Gould (2003)

Figure 1

*The Effects of Rewards on Intrinsic Motivation*

Figure 1 graphically depicts the effects rewards can have on intrinsic motivation. These effects are discussed below.

The informational aspect of a reward relays information about a person's competency. MVP rewards, All Star Selections, Sandow Trophies, among other rewards, all relay that the person receiving the reward is competent. CET suggests that if the informational aspect of a reward relays that the person is competent, this will enhance intrinsic motivation. Thus, a reward must be based on performance to enhance intrinsic motivation; at least, from an informational view point. Conversely, CET predicts that if a reward relays that the athlete is not competent, such as getting a last place reward, this will decrease intrinsic motivation.

The second property of a reward is the controlling aspect. This has to do with a person's *locus of causality*. Locus of causality is the degree people perceive their behavior to be freely determined (self determined) or caused by other people. If a person feels their behavior is caused by outside pressures from others, they would have an external locus of causality. If a person feels their behavior is self determined, or initiated, they would have an internal locus of causality. CET predicts that if a reward is perceived as controlling, people will attribute their behavior to an outside source (an external locus of causality). Conversely, if people do not feel controlled by the reward, they will attribute their behavior to self determination (an internal locus of causality). CET predicts that if a reward is perceived as controlling, it will decrease intrinsic motivation; but if a reward is not perceived as controlling, and the person has an internal locus of causality, intrinsic motivation will be high.

To elaborate on control and intrinsic motivation, people who have an internal locus of causality, feel that they participate in an activity because they want to (high intrinsic motivation); whereas, people who have an external locus of causality, feel that they participate in an activity because of an external cause (i.e. playing for the money). Therefore, "paying people off" can decrease their intrinsic motivation, because they may attribute their behavior to the money, rather than self determination. An example of something that would promote an internal locus of causality would be a coach who gives his athletes greater input on what drills are performed during practice. An example of controlling someone through a reward would be telling someone that you will give them such and such for doing such and such (external regulation). In this scenario, the reward is controlling the persons behavior, rather than self determination.

The key aspect of this theory is the *perception* of the receiver of the reward. Someone who gives a player a reward may have the best intentions for the athlete; but if it is perceived as controlling, it will decrease intrinsic motivation. For example, if a player perceives that he is being rewarded with cars or money, only so that he will stay on the team, this will decrease his/her intrinsic motivation, because they will perceive the reward as controlling. Additionally, the reward giver should stress the informational aspect of the reward, making sure the player knows that the reward was given to them to show a sign of appreciation for their hard-work.

### **Important note**

This article is dealing with the effects external rewards have on intrinsic motivation for activities that are already intrinsically motivating to the individual. Rewards have an entirely different effect on activities that are boring to an individual. Therefore,

these results should not be generalized to other scenarios. It also primarily makes predictions about when rewards are removed. Because while the rewards are being administered, this is a test of both extrinsic and intrinsic motivation. Lastly, CET does not make predictions on studies that combine verbal rewards with tangible rewards, because they would contribute to intrinsic motivation in opposite directions.

## Practical Applications

Now that the reader has a firm grasp on several important concepts, we can discuss various practical applications, based on the research reported in article 1.

- Informational aspect—for any reward, delivery is vital. You want to emphasize the informational message of competency to the individual. Stress that you are giving the reward because they did good. Horn (1985) suggests that if feedback is to be effectual, it must include information about the person's performance. If you just tell someone "good job" but do not explain why they did a good job, evidence suggests this may decrease intrinsic motivation. This is because your praise without additional feedback would be perceived as a controlling agent.
- Control—you want to avoid using controlling phrases. Plant and Ryan (1985) suggest that control is "any vocalization that pressures a person to behave a certain way." It is suggested that contextual factors that tend to control someone—such as pressure to feel, think or behave a certain way—lowers intrinsic motivation. For example, a mother who says, "you know what you should do" would be controlling compared to "what do you think you should do?" Or telling someone "Good job, you *should* keep up the good work" or "Good job, you are doing as you *should*." One experiment found that saying (Deci, Koestner, & Ryan, 1999) "I have not been able to use most of the data I got so far, but if you keep it up, I may be able to use yours" puts pressure on the person, decreasing his/her control. While the other participants were told, "compared to most of my subjects, you are doing really well" which resulted in more control, and higher intrinsic motivation. These two factors of control and information can be applied to all reward administrations.
- General advice—some general suggestions made by authors about this topic are a.) minimizing use of authoritarian style, and pressuring b.) acknowledge good performance, but not using rewards to strengthen or control behavior. C.) provide choice for how to do the task d.) emphasis interesting or challenging aspects of a task
- Unexpected tangible rewards—these rewards appear to be able to enhance intrinsic motivation because the participant performed the task without knowledge of the reward; therefore, the controlling aspect of the reward would not be as salient, and participants would attribute their participation in the activity to an internal locus of causality. Because of their informational aspect, they may also enhance intrinsic motivation. But we must be careful not give these too often, or people will come to expect the unexpected, which will lead to a decrease in intrinsic motivation. More on this in a moment.
- Verbal rewards—these rewards appear to be able to enhance intrinsic motivation. For example, telling someone they did a great job, and why. This is because the informational aspect is very salient, while the controlling aspect is typically low. Verbal rewards are effective, in part because they are

- unexpected rewards. In this context, if a coach always praises their athletes for performing an activity, the athletes may come to expect it, and CET would predict that intrinsic motivation would decrease. Three studies have in fact found that when participants were told they would be given performance feedback, and then were given positive feedback (verbal rewards) after completion of the task, intrinsic motivation significantly decreased! So evidence suggests that you should give verbal rewards in an intermittent fashion. This is further supported by studies on partial reinforcement. Lastly, as expected, results indicate that verbal rewards when not administered controlling increased intrinsic motivation. However, when they were administered controlling, they decreased intrinsic motivation.
- Performance contingent tangible rewards—these rewards are a lot more complex. While they can decrease control as engagement and completion contingent rewards do, they also relay a sense of competency. Therefore, CET predicts that if the informational aspect is more salient for performance rewards, it may be able to counteract the controlling aspect of the reward. Additionally, whether the message is portrayed as controlling or not will also determine whether the reward decreases intrinsic motivation or not. Evidence suggests that generally, they decrease intrinsic motivation, but not as much as engagement and completion contingent rewards do. However, people in performance contingent activities who get less than the maximum reward—for example, if you get a reward for being in the bottom 15%, or if you do not get a reward that you tried to obtain—show a sharp decline in intrinsic motivation—more so than any other group! This is because not only are they being controlled by the reward, but they are being delivered information that they are incompetent. Since in many cases, the majority do not achieve the standards of excellence taken to obtain a performance contingent reward, these can be especially dangerous to administer. Competitively contingent rewards appear to be very controlling, as they focus the participants locus of causality on winning, which is an external motivator.
  - Task non-contingent tangible rewards—these rewards do not appear to affect intrinsic motivation. This is because they do not require participating in the task, completing the task, or performing well on the task—just showing up. And they deliver no information about the person's competency. These rewards may be useful for when rewards are necessary, but are not used to motivate people or regulate behavior, such as regular salaries. This should allow us to commission people for their efforts without decreasing intrinsic motivation, if administered correctly.
  - Engagement and completion contingent tangible rewards—both of these seriously undermine intrinsic motivation. This is because they contain a high control aspect, but deliver no information about the competency of the individual. For example, you could be paid for participating in an activity, and whether you perform well or not, is irrelevant. Therefore, these types of rewards say nothing about the person's competency, *and* decrease their control.
  - Everyday life—Rewards are just one of a broad way of techniques in which we control people and decrease intrinsic motivation. Results show deadlines, evaluations, and imposed goals, all decrease intrinsic motivation (Deci, Koestner, & Ryan, 1999; Deci, Koestner, & Ryan, 1999, b; Ryan & Deci, 2000). Whereas, provision of choice, and acknowledgement of feelings, enhance intrinsic motivation (Deci, Koestner, & Ryan, 1999). These results are all centered on one key concept—control. Therefore, how information is relayed is vital for how an individual perceives rewards and instructions.

Numerous future articles can be written on the implications these theories have not only on bodybuilding, but everyday life—stay tuned.

- Kids—evidence suggests that rewards may be particularly undermining to kids. This would suggest we should be extremely careful with giving children tangible rewards in school, home, and other facilities, so as not to undermine their intrinsic motivation.

In summary, most rewards decrease intrinsic motivation, except under certain circumstances. Yes, rewards can control and modulate behavior; however, it is for this very reason that they decrease intrinsic motivation. We have to ask ourselves, when we control kids, and other people, are we focusing on the short term by modulating behavior through rewards, and neglecting the future? By decreasing intrinsic motivation of kids, and other people, this can have serious impacts on their futures. The goal of institutions such as school is to make people autonomous (self dependent). However, if they become dependent on our rewards and feedback, once these extrinsic motivators are removed, they may revert to dangerous habits.

Concerning the fitness industry, how common is it to give people prizes for reaching certain performance goals in various programs? Very common! And it is no wonder why we see people continually going on Yo-Yo diets. They start these programs, and their intrinsic motivation ends up worst than when they began. Of course, there are many other factors contributing to these results, but evidence suggests external rewards are a contributor.

These findings have extreme applications not only to athletics, but everyday life. The current author suggests studying these applications, and looking for situations to apply them in—you should not have a problem doing so! If you have any questions, feel free to write me. My email address is at the bottom of this article.

Keep it Hardcore,

Venom

Vice President of ABCbodybuilding.com

[Venom@abcbodybuilding.com](mailto:Venom@abcbodybuilding.com)