

# Habit Reinforcement

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Beyond the practical benefits of forming habits, such as improved health or productivity, there are also psychological and physiological benefits. The process of habit formation can boost self-esteem and confidence. Successfully sticking to a new habit reinforces the belief that change is possible, which can create a positive feedback loop that encourages further success.

Physiologically, the brain benefits from habit formation as well. As neural pathways strengthen and behaviors become automatic, the brain is able to conserve energy. This is why, once a habit is established, it feels effortless. The brain doesn't need to work as hard to decide whether to engage in the behavior, which frees up cognitive resources for other tasks.

Habit formation is a fascinating and complex process that has garnered significant interest from both researchers and the general public. Many people have tried and failed to establish long-lasting habits, from committing to daily exercise routines to adopting healthier eating practices. This essay delves into the science of habit formation, addressing myths, examining research findings, and providing practical strategies for cultivating habits that last.

## 21-Day Rule

One of the most common beliefs surrounding habit formation is that it takes precisely 21 days to establish a new habit. This idea originates from Dr. Maxwell Maltz's 1960 book *Psycho-Cybernetics*, where he noted that it took his patients about 21 days to adjust to their new appearance after surgery. Although Maltz did not conduct scientific studies to validate this claim, the concept of a 21-day timeframe gained popularity in the self-help community. This catchy number has since been repeated widely in books, articles, and online platforms as a convenient and optimistic guide to habit formation.

However, scientific research has debunked the 21-day myth. A groundbreaking 2009 study by Phillippa Lally and colleagues at the University of Surrey found that it takes much longer, on average, to form a habit. The study revealed that participants took anywhere from 18 to 254 days to turn a behavior into an automatic routine, with the average duration being about 66 days. These findings indicate that the time required to form a habit is highly individualized and can vary depending on several factors, such as the complexity of the behavior and the individual's commitment.

## Complexity of habits

Habits come in various forms, ranging from simple actions like drinking a glass of water after breakfast to more complex behaviors such as exercising regularly or learning a new skill. The complexity of a habit is one of the key factors that determine how long it will take to form. Simple habits that require minimal effort, like drinking water or brushing your teeth, are easier to establish than more intricate activities that demand significant time and energy, such as learning to play an instrument or committing to a daily workout.

For example, a study conducted by Lally in 2010 demonstrated that individuals who wanted to incorporate more fruit into their diet took less time to develop the habit than those who attempted more complex tasks like exercising regularly. These findings suggest that the more demanding a habit is, the longer it may take for the brain to rewire itself and for the behavior to become automatic.

## Repetition and consistency

The most significant factor in forming a habit is repetition. In Lally's 2009 study, participants who consistently repeated their desired behavior over time were more likely to succeed in making it a habit. Whether it was running every morning, eating a healthy snack, or drinking water with lunch, the key to habit formation is performing the activity regularly until it becomes part of the daily routine.

This process works because of the way the brain forms neural pathways. Each time we repeat a behavior, the neural connections associated with that action strengthen. Over time, these connections become so robust that the behavior becomes automatic. This explains why, after a certain period, we no longer have to think about behaviors like brushing our teeth or driving to work—we just do them.

## Motivation and willpower

While repetition is essential, motivation and willpower also play important roles in habit formation. At the beginning of the process, motivation is typically high, especially if the individual is starting a new year's resolution or embarking on a personal goal. However, motivation can fade over time, making it more difficult to maintain consistency. This is why many people fail to sustain their resolutions, such as going to the gym every day, beyond the initial burst of enthusiasm.

To combat this, experts suggest creating a clear plan and setting specific, manageable goals. For instance, rather than committing to a

vague goal like “exercise more,” individuals should aim for specific, measurable objectives, such as “work out for 30 minutes, three times a week.” This approach provides clarity and allows individuals to track their progress, which can enhance motivation over time.

## Environment

Your environment plays a significant role in habit formation. Behavioral psychologists argue that the environment is full of cues or triggers that prompt us to engage in certain behaviors. These cues can be external, like seeing a gym bag by the door, or internal, like feeling thirsty, which triggers the habit of drinking water.

By strategically altering your environment, you can make it easier to form new habits. For example, if you want to start exercising in the morning, you could lay out your workout clothes the night before. This simple action serves as a visual cue that reminds you to exercise when you wake up. Similarly, if you aim to eat healthier, keeping fresh fruits and vegetables on the kitchen counter rather than in the fridge can serve as a constant reminder to choose nutritious options.

## Accountability and rewards

Accountability is another powerful tool for forming habits. Research shows that individuals who have someone to hold them accountable are more likely to succeed in forming new habits. This accountability can come from a friend, a coach, or even an app that tracks progress.

In addition to accountability, rewards can also be motivating. However, for rewards to be effective, they need to be immediate rather than delayed. Delayed rewards, such as treating yourself to a shopping spree after a week of successful workouts, can lose their impact because the connection between the behavior and the reward is weakened over time. Instead, pairing a reward with the behavior itself can enhance motivation. For instance, listening to your favorite music while working out can make the experience more enjoyable and encourage you to keep going.

## Overcoming setbacks

Life is unpredictable, and sometimes, even the most committed individuals miss a day or two of their new routine. This is entirely normal, and it’s important not to get discouraged. Missing a day does not mean that all progress is lost, but it is essential to evaluate why the setback occurred and to adjust accordingly.

For example, if you miss a workout due to a busy schedule, it may help to reassess your plan and find ways to make the activity more feasible. Instead of trying to run five miles every day, you might reduce the distance or frequency of the runs and gradually increase them as the habit becomes more ingrained. The key is to not give up entirely but to adjust your goals to make the habit more sustainable in the long term.

## Reference

Lally, P. (2010, October 19). *How long does it really take to form a habit?* Scientific American. <https://www.scientificamerican.com/article/how-long-does-it-really-take-to-form-a-habit/>