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# How Habits are Formed

## How are habits formed: Modelling habit formation in the real world.



### Principle

Habits can be formed by simply repeating an action associated with a cue.

### Quote

“repeating a behavior in response to a cue appeared to be enough for many people to develop automaticity for that behavior.”

### So What - Application

If we can develop habits by repeating an action given a certain cue, then all it takes to do something automatically and not have to think about it anymore is to use self-control to consistently do it for a period of time.

For those of us who have heard that it takes 21 days to make a habit, in this study very few people’s chosen actions were habits by 21 days. It can take awhile (up to 8 months in this study), so committing to and finding ways to support the habit while it is developing is important.

### The Research Story

Four researchers from University College London studied the process of habit formation in 96 volunteers for 12 weeks.

They asked the participants to choose an exercise, eating, or drinking habit to carry out in the same situation once a day. This situation, like breakfast or lunch, acted as a cue to the action. They didn’t choose times because research shows that trying to remember something in the future works better with situations that occur and cue the brain rather than times where you have to keep checking the know if it’s time to act.

They didn’t give rewards, though participants chose their own habits, so they were probably internally rewarding. Every day they were given a questionnaire that monitored the action and how aware they were, how much control they needed, and how efficient their actions were.

The idea is that repetition makes a habit more and more automatic by smaller and smaller degrees with each repetition until it hits a plateau. 69 of the 82 volunteers showed this habit formation curve (14 had dropped out).

Different habits have different levels of complexity and effort, so they grouped habits into exercise, eating, and drinking behaviors. It did take longer to develop the exercise habit, which they determined was more complex than eating or drinking habits.

Most volunteers ended up developing automatic habits. Habits took an average of 66 days to develop, but ranged from 18 to 254 days. They did some statistics and found that missing a day didn’t affect habit formation. Other research shows missing longer periods of time, like a week, can slow habit formation, but a single miss followed by doing the habit the next day didn’t disrupt the habit forming trajectory.

For most people, repeating a behavior in response to a cue consistently will increase automaticity, essentially making it a habit.

Lally, P., van Jaarsveld, C. H. M., Potts, H. W. W., & Wardle, J. (2010). How are habits formed: Modelling habit formation in the real world. *European Journal of Social Psychology*, 40(6), 998–1009. <https://doi.org/10.1002/ejsp.674>

