

Good Intentions Versus Bad Habits: Why the Old Ways Win Out

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Why are old habits so hard to break? A new study suggests that over time, our bad habits (such as smoking cigarettes or over eating) become automatic, learned behaviors. Even if we consciously try to put new good intentions into place, those previously learned habits remain stronger in more automatic, unconscious forms of memory.

This research may help explain why when we're under stress we fall back into old habits, such as cheating on a new diet after a bad day at work. Stress can weaken our control over memory and behavior, so that those automatic, habitual responses from the past become more influential. With control weakened, those automatic responses - such as eating a cookie or smoking a cigarette - can override our new good intentions.

Aging can also erode aspects of memory that require control while leaving more automatic, learned behavior preserved. The new research suggests that new learning requires control, whereas past habits are relatively automatic. This may help explain why it can be so hard for older adults to "learn new tricks" and maintain them over time.

The findings are presented in an article, "Which Route to Recovery? Controlled Retrieval and Accessibility Bias in Retroactive Interference," which will appear in the November issue of *Psychological Science*, a journal of the American Psychological Society. The research was conducted by psychologists Cindy Lustig, University of Michigan, Alex Konkel, University of Illinois, and Larry L. Jacoby, Washington University.

Participants in the study first learned one way of responding to a cue word (e.g., "Say 'cup' when you see 'coffee' "), and then later learned another way (e.g., "Now say 'mug' when you see 'coffee' "). They were given memory tests both immediately after learning the words, and the day after. Some people were told to control their memory and give only the first response ('cup'). Others were told to just give whichever response came automatically to mind.

Those controlling their responses did a good job of giving only the first response on both days. The interesting results were for the people who responded automatically, giving whichever response came to mind. On the first day, their answers were split evenly between the two possibilities. However, on the second day, they gave the first response ('cup') much more often than the second response ('mug'). The second response seemed to fade from memory, while the first response grew even stronger than it had been on the first day.

In their study, the researchers sought to take a new look at why old habits seem to prevail over our attempts to change our behavior. Their findings suggest that even though the strength of an old habit may fade over time, our memory for it will be stronger than any new good intentions that succeed it.

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