

Is There an Ideal Number of Health Messages to Prompt New Habits?

December 06, 2017



Imagine: You're feeling much more sluggish than usual, and it's not just from devouring those last pieces of pumpkin pie at Thanksgiving. You visit the doctor and, after administering some tests, he gives you the not-so unexpected news: Your current diet is taking a toll on your overall health and well-being.

The doctor sits down with you to discuss multiple ways to live a healthier lifestyle—such as creating a daily exercise regimen and developing a nutrition plan. New [research](#) suggests that your success in remembering these recommended strategies may depend, at least in part, on the number of health recommendations your doctor gives you.

In a [study](#) published in *Clinical Psychological Science*, psychology researcher Jack McDonald and colleagues investigated the optimal number of health recommendations needed for patients to enact healthy behavior changes. Specifically, the researchers examined participants' recall and intent to act—two psychological processes that are critical in guiding behavior change. The team hypothesized that the giving more recommendations would increase the number of recalled recommendations, but decrease the overall proportion of recalled recommendations.

In one online experiment, the researchers manipulated the number of recommendations that appeared on a single page displayed on-screen, with a minimum of two and a maximum of 20. Each recommendation was clearly distinguishable from the others on the page. All recommendations were formatted to include

the recommended behavior change (e.g. wash your hands) in the first sentence, followed by a sentence or two justifying its health benefit (e.g. it will help you avoid germs and getting sick). After reading the set recommended behaviors, participants saw another screen and were asked to recall and type the individual recommendations.

The results showed that as the number of recommendations increased, recommendation recall was less complete, confirming the researchers' initial hypothesis. The amount of presented recommendations positively influenced the number of recalled recommendations, but negatively influenced the overall proportion of recalled recommendations.

In a second experiment, the researchers explored the number and proportion of intended behavior, surveying 266 online survey participants. In this case, the total recommendations provided for a given issue ranged from two to 12, with recommendations displayed one at a time. Participants were asked to recall the recommendations by typing them in a single-entry text box. The number and proportion of recommendations participants described as wanting to implement in their own life were accounted for, as well, through their response to an open-ended essay question.

Results from this experiment showed that a higher number of recommendations offered a higher number of retrieval cues, which allowed participants to recall more items. The findings were similar to the first experiment, in which the number of recommendations presented was positively associated with the number of recommendations recalled but negatively associated with the overall proportion of recommendations that were recalled. Participants reported a greater number of intentions to follow through as the number of recommendations increased, but the overall percentage of follow-through intentions they reported decreased.

The study suggests that the number of recommendations given to patients matters when it comes to improving public health. Choosing how many to use, however, depends on the practitioner's intervention goal. For instance, if the goal is to have patients follow a complete set of necessary behaviors, such as taking medication, then it may be best to suggest fewer health recommendations. On the other hand, if missing some behaviors has negligible health consequences, then prescribing more recommendations may be optimal.

Reference

McDonald, J., McDonald, P., Hughes, C., & Albarracin, D. (2017). Recalling and intending to enact health recommendations: Optimal number of prescribed behaviors in multibehavior messages. *Psychological Science*, 5, 858-865. doi: 10.1177/2167702617704453