Prior meta-analytic work has shown that interventions that target health intentions produce small to moderate changes in health behavior (Webb & Sheeran, 2006).

Theory-based interventions often target attitudes, norms, and self-efficacy in order to increase intentions and promote health behavior change.

We found that interventions that change self-efficacy were able to produce small-to-medium changes in behavior. Interventions that change attitudes were able to elicit small changes in behavior, and those that changed norms only had a negligible effect on behavior (Maki, Montanaro, Hooper, Bryan, Rothman, Sheeran, SPSP Poster, January 2013).

The extent to which these constructs elicit behavioral change may depend, in part, on the class of behavior targeted. For example, might interventions that elicit change in self-efficacy produce greater behavior change for maintenance behaviors than frequent prevention behaviors?

To assess the impact of cognition change interventions on different classes of health behavior, we meta-analyzed 129 studies which met the following criteria:

(a) at least one experimental and comparison condition
(b) significant changes in one of the cognitive constructs of interest
(c) measurement of subsequent health-related intentions or behavior

A total of 21 different behaviors were examined in these studies, which could be categorized into three broad classes:

- frequent prevention behavior (8 behaviors; e.g., exercise)
- infrequent prevention behavior (8 behaviors; e.g., cancer screening)
- maintenance/adherence behavior (5 behaviors; e.g., diabetes care).

Changes in the cognitive constructs resulted in small-to-large effects on behavior for all three behavioral classes; however, the magnitude of these changes depended on the class of behavior.

These findings indicate that the effect of cognition change interventions is moderated by different classes of health behavior. The effect attitudes and norms have on behavior change appears to depend a great deal on the class of health behavior. Self-efficacy, on the other hand, has moderate effects on all classes of behavior.

These results suggest that class of health behavior is an important factor in determining which constructs should be targeted to produce the greatest amount of behavior change.

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