Rebranding Exercise: There's an App for That
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Abstract

Historically, the approach of promoting exercise by emphasizing its effects on long-term health has predominated. Despite this tradition, there is no strong empirical support for such an approach. Recent work has argued that exercise suffers from a "branding problem" and efforts to promote exercise may be better served by switching the focus from the long-term benefits of exercise that improve health, to the immediate benefits of exercise that enhance quality of life. One way to disseminate and reinforce this message could be through a smartphone application designed to monitor daily improvements on quality of life constructs correlated with exercise participation.

According to data from the National Center for Health Statistics, only about 20% of Americans meet the recommended guidelines for leisure-time aerobic and muscle-strengthening activities. Insufficient exercise constitutes a major threat to health and longevity because exercising regularly has been shown to reduce susceptibility for numerous diseases and impairments. In a recently published article, "Rebranding Exercise: Closing the Gap Between Values and Behavior," Segar and colleagues posit that one reason rates of exercise participation remain low is because exercise suffers from a "branding problem" and further argue that a retooling of the exercise marketing plan is sorely needed. Despite the strong face validity of traditional exercise promotion campaigns focused on the physical (e.g., weight management) and physiological (e.g., healthy aging and disease prevention) benefits of exercise, Segar and colleagues have shown that women who value such benefits exercise significantly less (between 15% and 34% less) than those who value exercise for its quality of life-enhancing outcomes (e.g., "feeling good" and "happiness"). Given that the long-term disease prevention approach is not supported by the empirical evidence, Segar and colleagues, along with other experts in the field, have advocated for a strategy that would instead emphasize the immediate benefits exercise provides for daily life.

Building on this astute point, we believe that specifically highlighting the more proximal, quality of life-enhancing exercise outcomes (e.g., improved affect) would be a more effective way to "market" exercise. The exercise-affect relationship has been suggested to be an especially relevant focus, as more favorable affect during and immediately following exercise has been linked to subsequently greater exercise intentions and more frequent exercise behavior 6 and 12 months later.

Highlighting the affective benefits of exercise is intuitively appealing, but what is less intuitive is how one might go about marketing exercise in this way, leading even prominent exercise and affect researchers including Ekkekakis and colleagues to conclude that "exercise is a best buy but a tough sell." Other related questions including how best to personalize the message, or how to "scale up" such a strategy to have the largest public health impact, are also currently unanswered.

As one potential solution to this problem, we propose that a smartphone application designed to increase the extent to which people attend to the immediate benefits of exercise could be a novel use of technology that would address Segar and colleagues' call for an innovative and easily disseminable marketing approach. The results of several recent reviews and meta-analyses have implicated self-monitoring (observing and processing information concerning internal and external states with the purpose of increasing awareness) as an effective strategy for maintaining physical activity behavior. As one example, a meta-regression by Michie and colleagues tested the effectiveness of 23 intervention techniques and showed that self-monitoring was the technique most strongly associated with sustained behavior changes to diet and physical activity.

Taken together, the literature suggests that interventions designed to increase physical activity behavior might consider a focus on the immediate benefits of exercise and, if possible, use a self-monitoring approach to increase the saliency of those benefits. In agreement with this point, prominent exercise and affect researcher has even recently suggested that "self-monitoring and self-regulation may provide the keys to increasing exercise adherence." Through the use of mobile technology, it may be possible to achieve a synergy of these two concepts. Specifically, a smartphone application designed to monitor daily improvements on quality of life constructs correlated with exercise participation (including affect during and after bouts of exercise) might be one way of "rebranding" exercise.
There is reason to think that such an application could be widely disseminated and implemented. Smartphone sales and smartphone application downloads have risen considerably in the past several years. As of 2010, nearly half of all cellular phone users owned smartphones capable of accessing Web-based applications from their phones, and this percentage has been steadily increasing. Moreover, survey data suggest that African-Americans and Latinos are more likely to use data applications than white Americans.

Because inactivity rates are considerably higher among ethnic minority groups, this approach could have the additional benefit of targeting disparities in exercise participation. Such an application would address the National Institutes of Health (NIH) Division of Cancer Control and Population Sciences’ (DCCPS) goals to “develop efficacious, effective, and culturally relevant interventions to reduce health disparities” and to conceive of innovative "strategies for their dissemination.”

The idea of using mobile technology to promote a health behavior is not new. Mobile health, or "mHealth," is the use of mobile phone technology to disseminate general or personally tailored health information. In the past decade, mHealth has been steadily growing in popularity within the medical community, and now, many variations of mHealth are being marketed to the general public. For instance, apps that help individuals keep track of their diet and caloric intake, monitor glucose levels, and track aspects of their workouts are available for purchase. Regarding the use of mHealth for tracking physical activity behavior, recent work by Bexelius and colleagues has validated the use of smartphone applications for collecting data on physical activity levels and energy expenditure. What is novel and innovative about our proposal is the idea of harnessing mHealth technology not for the monitoring of physical or health-related improvements associated with exercise, but for the monitoring of psychological improvements associated with exercise.

There may not be an app for that yet—but, it is easy to imagine that such a smartphone application could be developed. With such an application, individuals could keep track of their exercise-induced affect changes and receive feedback on how their behavior led to improved quality of life outcomes. As Segar and colleagues suggest, this may lead to a greater appreciation of the downstream benefits that impact and improve daily life and motivate behavior.

As with any behavioral intervention approach, use of the proposed smartphone application might not be appropriate or sufficient to effect change for all of those who use it. Such limitations notwithstanding, we believe that the smartphone application proposed herein represents a collaboration of two empirically supported ideas—self-monitoring effects on behavior and the relevance of quality of life constructs correlated with exercise participation—that can be widely disseminated. Research testing this approach could continue the discussion started by Segar and colleagues and contribute to a more advanced understanding of exercise adherence and the best way to promote it. Beyond this, such an application represents a novel synergy of the missions of the NIH DCCPS and researchers interested in the use of technology to disseminate and reinforce health interventions broadly and cost effectively.

References