



## Active Voice: Which Motivation Works Best for Long-Term Active Living and Weight Control?

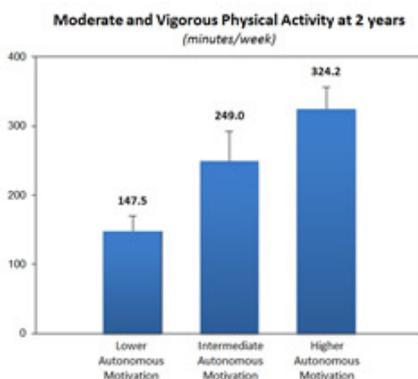
By Pedro J. Teixeira, Ph.D.

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Pedro J. Teixeira, Ph.D., is Professor of Physical Activity, Nutrition and Obesity in the Department of Sports and Health, Faculty of Human Kinetics at the Technical University of Lisbon. His research interests include motivational and self-regulatory predictors of behavior change and how to improve physical activity and weight control interventions. In the April 2011 issue of *Medicine & Science in Sports & Exercise*® (MSSE), Teixeira and co-authors published a related research paper entitled "Exercise Autonomous Motivation Predicts Three-Year Weight Loss in Women."



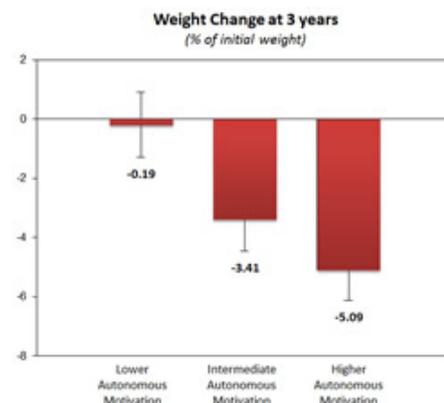
About 20 years ago, Drs. Rod Dishman, James Sallis, Gaston Godin and many others were pioneering investigations in what distinguished active from sedentary people. By the mid-1990s, Dishman's book *Advances in Exercise Adherence* accurately captured this landmark research. Following in their footsteps, questions such as "How should I frame my exercise prescription to target key mediators of change?" and "Which theory-based behavioral principles should I follow in my practice?" are crucial today for designing interventions that really help individuals change their behavior for good. Successful initiatives, such as [Exercise is Medicine](#)®, illustrate the timeliness of this topic. I personally feel that effectively helping more people become and remain physically active is the single greatest challenge in the field of exercise science today.



There is no question that employing the very best science will be required to more fully understand why individuals change their behavior, how to make changes last and how to improve interventions to achieve lasting change. While political and environmental measures are key to reverting population trends in obesity and inactivity, this does not mean we should throw in the towel on individual-level interventions, which can sometimes be scaled to mass application. Major societal change will take time to be implemented. Meanwhile, overweight and obese individuals are seeking effective solutions and evidence-based professional support to deal with their excess weight, in one-on-one sessions with health professionals or as part of community or commercial group programs.

Behavior change immediately brings up the topic of motivation. Recent results we [published in MSSE](#) show that a particular type of motivation to be physically active predicts sustained adherence to exercise and three-year weight loss maintenance in overweight women (see figures below). In a randomized controlled trial, we observed that more intrinsic reasons to be active and an internalized form of self-regulation that we call *autonomous motivation* were associated with long-term behavior change, while more extrinsic forms of motivation were not. Autonomous motivation (or having an internal *locus of causality*) can simply be described as having a strong sense of ownership and personal endorsement (or volition) about one's exercise routine. When autonomous, one truly *wants to* be active, which is opposed to the pressure associated with feeling one *has to or should* exercise. Thus, in interventions, it's not only important to address what kinds of goals the counseling aims but also who does the steering. Our study clearly underlined that the qualitative aspects of motivation need to be emphasized when long-term behavior change is the goal.

From a practical viewpoint, [results from our trial](#) suggest that exerting pressure, establishing deadlines, having external contingencies (such as using financial or similar incentives) and offering little choice about how to lose weight all decrease autonomous motivation and may reduce the likelihood of long-term success. Based on the principles of self-determination theory, we instead recommend focusing on creating *autonomy-supportive* interventions. By offering choice, promoting genuine interest and involvement, explicitly focusing on experiential dimensions of exercising, creating enjoyment and challenge, and actively seeking sources of personal meaning beyond immediate behavior change, these interventions increase intrinsic motivation and ownership (i.e., perceived autonomy) about exercise. In fact, these variables could be among the best determinants of whether clients and patients will revert back to where they started or will adopt a more active, healthful and energetic life.



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