Breaking Free From Bad Behaviors

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Many people try their best to eat healthy and exercise regularly. Others strive to be good environmental stewards, cutting down their usage of electricity and water. And still others intend to treat everyone fairly, regardless of race, gender, or sexual orientation.

But those efforts require a level of self-control that can easily be drained. Old habits die hard.

In a cross-cutting theme program sponsored by the NIH Common Fund Science of Behavior Change and titled "Breaking Free — Intersecting Perspectives on the Science of Behavior Change" at the 2016 APS Annual Convention in Chicago, psychological scientists shared cutting-edge research on halting and reversing destructive behavior.

APS Fellow Russell A. Poldrack of Stanford University strayed from the focus on self-control to discuss his research on the use of automatic mechanisms to change behavior. Poldrack asserts that habits we learn early on (including bad ones) are not overwritten when we break them, but instead lurk in a latent state to emerge later on. His lab is investigating the brain processes associated with learned behaviors and testing methods to make positive behavior changes long-lasting.

APS Fellow Robert Cialdini, Arizona State University, and Mary A. Gerend of Northwestern University discussed the so-called "nudge" approach to behavioral intervention. Gerend reviewed findings on how the way a message is framed — whether it emphasizes the benefits of action or the costs of inaction — can significantly sway people's motivation and health behavior. Cialdini shared his research findings about the ways that messages that emphasize social norms can effectively change the way people consume energy.

Inbal Nahum-Shani, University of Michigan, introduced Just-In-Time Adapative Intervention (JITAI), a tool designed to facilitate the real-time delivery of personalized information, behavioral prompts, and recommendations to patients via their mobile devices. The JITAI team in which Nahum-Shani works is developing a suite of innovative learning algorithms, including treatment designs and data analysis methods, to help investigators obtain and utilize empirical evidence necessary for developing high-quality JITAIs.

APS Fellow Ronald E. Dahl, a pediatrician and developmental scientist, noted that adolescence is a period of particular vulnerability to behavioral and emotional health problems. Dahl's work focuses on adolescence as an opportune time for behavioral-change interventions.

APS Fellow Bruce Bartholow, University of Missouri, investigates the acute effects of alcohol on social cognition and self-control. He discussed how alcohol affects brain responses linked to motivation and social behavior — specifically in the expression of racial bias.

Look for more details on this symposium in the Convention issue of the Observer, coming this summer.