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“Positive Affect” for Positive Results

Studying the Effect of “Positive Affect,” or Happy Feelings, on Recovery

Patients Under Study

Can positive affect and self-affirmation help patients keep up their determination to practice the healthy behaviors they chose to follow? Positive affect refers to happy feelings that are induced by everyday events, which a person could experience in the normal course of a day’s activities. Our research groups [Alice M. Isen, Johnson Graduate School of Management/ Psychology, and Mary E. Charlson, Center for Complementary and Integrative Medicine, Weill Cornell Medical College (WCMC)] joined forces to study three classes of patients: cardiac catheterization, asthma, and hypertensive African-American males.

Cognitive Processes

My research group at the Cornell-Ithaca campus has been looking at how positive affect influences cognitive processes such as problem solving, working memory, cognitive flexibility (the ability to consider multiple aspects of problems and situations at the same time and respond appropriately to the full situation), and processes that are influenced by these abilities, such as social interaction, negotiation, decision making, and self-control. In previous work, my group found that positive affect fosters innovation, creative problem solving, and the ability to resolve conflicting situations in mutually satisfying ways, but it also reduces risk taking in dangerous situations.

Clinicians’ Diagnostic Processes

The Isen group has also shown that positive affect leads people to be more open to considering all the information relevant to the problem, not just information that fits with a person’s preconceptions. For example, in two studies in which we investigated clinicians’ diagnostic processes, we found that physicians in whom positive affect had been induced before undertaking a diagnostic problem recognized the domain of the illness more readily than control participants in whom positive affect had not been induced. Most importantly, this group was significantly less likely than the control group to distort or ignore information that did not fit with their initial diagnostic hypothesis. The physicians in the positive-affect condition, even though they recognized the correct domain of the illness earlier than the controls, were not more likely to jump to conclusions about the specific illness, show premature closure, ignore important information, or in any way show impaired thinking.

In another study, the clinicians in whom positive affect had been induced showed less confusion than controls and were more likely to integrate the information in the task and also more likely to go beyond the minimum task requirement (diagnosis of one described case) to suggest possible treatments

Provided



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FASCINATING



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- In two studies in which we investigated clinicians' diagnostic processes, we found that physicians in whom positive affect had been induced before undertaking a diagnostic problem recognized the domain of the illness more readily than control participants in whom positive affect had not been induced.
- The Charlson group has searched for processes that will increase people's ability to follow medical advice.

and to diagnose other cases described in the materials. All of these results most likely reflect increased ability of people in positive affect to integrate and handle more complex information more flexibly.

Self-Control

Another focus, following earlier work, is on self-control. We have already shown that positive affect leads to self-control and that one possible process underlying this effect of

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positive affect is that it increases the ability to see a connection between how hard one tries, how effective one is, and what one's outcomes are. Our current research, so far, suggests that positive affect enables two kinds of self-control. One is persistence with a difficult task when the task is important, even if a person has already been working on another arduous task. The second type of self-control is resistance to temptation in a situation where the most beneficial or appropriate behavior is to avoid a risk or a tempting alternative. Other research in my group indicates that this may result from the increased flexibility that arises from positive affect and that positive affect enables better monitoring of one's memory, alternatives, and behavior as well as improved cognitive control. For example, our current work is showing that positive affect facilitates incidental learning, divided attention, and the ability to stay on-task even when stimuli similar to the target stimuli are presented as distractors. Related research shows that positive affect also increases awareness that important information needed in order to solve a problem is actually missing, when insufficient information has been provided. In the absence of positive affect or other condition that gives people a clue that the needed information is missing, people tend to make the error of thinking that they have enough information and are overly confident in their choices and answers.

The "Dopamine Hypothesis"

We are also researching the neuropsychological underpinnings of these cognitive processes that are fostered by positive affect, in particular the "dopamine hypothesis." This hypothesis says that positive affect is associated with release of dopamine into brain regions that are rich in dopamine receptors. This, in particular, affects the frontal regions that enable thinking, working memory, conflict resolution, and cognitive monitoring.

Achieving Healthy Behavior Goals

The Charlson group is investigating ways of trying to increase patients' ability to achieve their healthy behavior goals. In previous research they have searched for processes that would increase people's ability to follow medical advice. The medical community typically sees this as volitional, involving "compliance" or "adherence" to medical regimen. However, our view is that this ability is similar to people's ability to stick to their own resolutions, a notoriously difficult problem—witness the huge problem people have in maintaining New Year's resolutions, for example.

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