

the other half learned that their personality was simply normal.

Next we asked them how they felt about a debate regarding dining cars on trains. To test whether the personality test results altered their desire to stand out in the crowd, we showed them a chart that claimed that either 79 or 21 percent of respondents believed that dining cars should be dropped from German Federal Railway trains.

As we discovered, the subjects who had been told they were average were much more likely to opt for the minority opinion. In contrast, those who had been told they had notably unique traits tended

to agree with the majority. We interpreted this as meaning that the people who had been led to believe they were unremarkable had felt that their individuality was threatened and thus offered a dissenting opinion as a way to differentiate themselves. People will express their individuality even in something as mundane as a debate on German dining cars.

The realization that the desire to both fit in and stick out can drive decision making has not been lost on retailers and product designers. People who wish to be seen as tough, for example, are more likely to sport a leather jacket. To come across as shrewd in business, a person might acquire a cus-

## FROM CONTRETEMPS TO CREATIVITY

FOR SOME PEOPLE,  
HARDSHIP CAN  
TRIGGER CREATIVE  
GROWTH

*By Scott Barry Kaufman*

"I paint in order not to cry," artist Paul Klee once remarked. The artist suffered from an autoimmune disease, which crippled his hands and made it difficult for him to even hold a pen. Yet he painted obsessively. His turmoil seemed to release an outpouring of creative energy.

Systematic research has shown that many eminent creators—think of Frida Kahlo, the Brontë sisters or Stephen Hawking—endured harsh early life experiences, such as social rejection, parental loss or disability. A growing field of research, called post-traumatic growth, now seeks to unveil why adversity and ingenuity sometimes go hand in hand and why some people blossom more than others in the wake of trying times.

In a study published in 2013, psychologist Marie Forgeard of the University of Pennsylvania tackled these questions by asking a sample of adult partici-

pants to recall the single most stressful event they had experienced during their life. Most participants described a traumatic occurrence that happened either to them or to a loved one, such as going through a natural disaster, an accident, physical or sexual assault, illness or the loss of a loved one. Participants also completed measures of their involvement in creative endeavors.

The subjects tended to report that their most traumatic experiences motivated them to engage in creative behavior in a wide range of domains, including the arts and business, as well as within their relationships. This heightened motivation to pursue creative activities—also called creative growth—predicted a more general tendency to perceive new opportunities in life after the stressful circumstances. Commenting on these results, Forgeard noted that "going through adversity may enable individuals to see the world, and their role in it, in a different way."

Yet not everyone can wring lemonade out of life's lemons. Forgeard observed that people who are high in one particular personality trait, "openness to experience," are more likely to report creative growth following trauma. Those who have this trait enjoy exploring their rich inner landscape of emotions, ideas, daydreams and fantasies. They also often possess two other attributes: they tend to be more unconventional

than others and to have a higher need for uniqueness. In other words, individuals who are open to experiences are more likely to find themselves in unconventional and challenging situations and to construct meaning out of them—even when these experiences are not chosen but imposed, as with adverse circumstances.

Sharon Kim, an assistant professor at the business school of Johns Hopkins University, and her colleagues probed one aspect of this correlation in a 2012 study. They examined whether a need for uniqueness might fuel creativity in the wake of social rejection, a kind of adverse event. After assessing their participants' need for uniqueness, the researchers told some of their subjects that they were not selected to be in a certain group, and therefore they had to complete a set of tasks alone. The remaining individuals were told that they would join their group after finishing those same tasks.

Everyone then worked through a test of creative thinking that involved seeing an uncommon connection between words. For example, they might be asked to find the word connecting "fish," "mine" and "rush."\* The researchers found that participants who experienced social rejection during the experiment performed better on the creativity test than those who felt included in the group. Consistent with Forgeard's findings,

tom-tailored suit. These behaviors may seem commonsense, but the underlying motivation is to signal an individual's inner self to the outer world.

To understand how this need motivates consumer behavior, consider a study published in 2012 by graduate student Cindy Chan of the Wharton School of the University of Pennsylvania and her colleagues. They examined how purchasing decisions reflect a person's attempts to juggle identifying with a social group and maintaining individuality.

Chan and her co-workers suspected that consumers satisfy their competing motives on different dimensions of a given product. To test this idea, the

researchers recruited college students who belonged to one of their university's eating clubs. Similar to fraternities, the eating clubs differ in their social identities, with one club attracting athletes, another drawing science and engineering students, and so on. The researchers took pictures of participants from three clubs and blurred the images so only the clothing remained visible. The students also filled out a questionnaire to measure their need for uniqueness.

Then a group of students drawn from those same three clubs viewed the photographs and guessed the subject's club. They also rated the

those who were already high in a need for uniqueness displayed the largest improvements.

The real question, of course, is why adverse events—whether in the form of social exclusion or a personal tragedy—can induce creative behaviors. According to a theory by psychologist Ronnie Janoff-Bulman of the University of Mas-

sachusetts Amherst, trauma shatters prior assumptions about the world and oneself. Thus, an adverse life event might not be strictly necessary to prompt creative growth. Maybe any experience that shakes up our prior beliefs will do the trick.

Psychologist Simone Ritter of Radboud University Nijmegen in the Nether-

lands and her colleagues explored this possibility in a study published in 2012. The team had some of the participants enter a virtual-reality world that violated the laws of physics. For instance, as people walked toward a suitcase lying on a table, the size of the suitcase decreased, and as they walked away, its size increased. Trippy! A second group merely watched a movie of those unexpected occurrences.

The researchers found that those who experienced the weird events in virtual reality displayed greater flexibility on a test of creative cognition than those who merely watched the film. They hypothesize that any unusual and unexpected event—whether it is the death of a parent or a semester abroad—can facilitate cognitive flexibility.

This is good news for anyone who wishes to increase his or her creativity without having to experience trauma. Flip the script of your ordinary routine. Butter your toast with your hands. Smile at everyone who passes by. Moonwalk on your way to school. With your brain snapped out of its ordinary awareness, you will be in a better frame of mind to create.

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*\*The answer is "gold."*



THINKSTOCK (Lightbulb); ISTOCKPHOTO (woman)