Mind Over Matter

When it comes to urges, “just say no” doesn’t always work. Consider the Stroop effect, a standard experiment in psychology that asks subjects to quickly read aloud the color of words, such as “red,” when printed in a different color ink, like blue. No problem, right? Wrong.

The instant the subject’s eye travels over the word “red,” the brain registers conflict. It’s the powerful urge to read the word rather than state the color that interests SF State Psychology Professor Ezequiel Morsella, whose Action and Consciousness Laboratory explores the nature of conscious action and its implications in addressing disorders of self-control, such as addiction.

While the Stroop effect—which has been used to study everything from anorexia to schizophrenia—is a benign phenomenon compared to more detrimental urges, or “hot conflicts” such as taking drugs, the nature of how the conscious and unconscious mind work together to address these urges is surprisingly similar.

“For obvious reasons, we can’t induce these kinds of hot conflicts in a laboratory setting,” explains Morsella, who is collaborating with University of California, San Francisco’s (UCSF) Department of Neurology to isolate the regions in the brain that relate to conflict and self-control. “We have to look at more innocuous forms of action conflicts, like the Stroop task, that share a similar origin. By studying how you get any urge, you can find ways to eradicate harmful urges.”

It’s not the first time Morsella has investigated the science of consciousness. At Yale, where he recently completed his postdoctoral training, he conducted studies on conscious urges, using functional magnetic resonance imaging (fMRI) to identify the neural correlates—the active regions in the brain—associated with conscious aspects of self-control.

At SF State, Morsella is taking his research one step further. Subjects in his lab, a mix of student volunteers and paid participants, are conducting experiments that focus on weakening conscious urges. How, and by what means, is currently “hush-hush,” says Morsella, but once perfected, the experiments will be tested using fMRI scanners at UCSF.

“This is basic neuroscience research, but it will provide a greater understanding of the nature of self-control. After all, you really can’t fix something until you know how it works.”

Say aloud the colors of each of these words, as quickly as you can. Your brain may register conflict—something that interests Professor Ezequiel Morsella.

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Human Rights Watch

In 1988, William Lay helped organize a surge of protesters who took to the streets of his native country, Burma, demanding basic human rights and democracy. An estimated 3,000 people died at the hands of the country’s military junta that day. Lay was among the lucky who escaped.

Nearly 20 years later, peaceful protests in Burma, also known as Myanmar, were silenced by guns once again last September. But this time, Lay, now a senior at SF State, was an intern on Capitol Hill, urging government officials to help his friends and family.

Each year the Panetta Institute hosts interns who are appointed by the presidents of their respective California State Universities as well as Santa Clara and Dominican universities. After an intensive two-week course at CSU Monterey Bay with Leon Panetta and others who know the legislative process firsthand, interns are assigned to a Washington, D.C., office of a member of the California congressional delegation.

“The Congressional internship was a great opportunity to learn more about the policy-making decision process and to gain hands-on experience in the U.S. Congress,” says Lay, who worked with Rep. Tom Lantos, the founding co-chair of the Congressional Human Rights Caucus.

Lay contributed his knowledge and insights to the caucus as it worked on a bill, which has passed in the Senate, designed to expand the U.S.’s financial and diplomatic restrictions against Burma’s government, as well as aid individuals and organizations seeking democracy in the country.

Lantos, who taught economics at SF State from 1954 to 1983 before he was elected to Congress, died Feb. 11, a loss that Lay felt deeply for both himself and human rights defenders across the globe. He says working with Lantos has inspired him to pursue a career as a human rights lawyer. “People are imprisoned, silenced—humans like us—on the other side of the wall. We have the obligation to stand up and talk. Why stay silent?”