

Engle-Friedman Studies Sleep and Sleep Deprivation

Dr. Aldemaro Romero Jr. *College Talk*

“Clinical psychology is about helping people with specific issues. I have worked on insomnia. Probably the most effective treatments for insomnia are non-drug related. I have worked with behavioral methods, and they have now become a standard clinical practice.” That is how Dr. Mindy Engle-Friedman explains what her work is all about.

Dr. Engle-Friedman is a native of New York City. She received her bachelor’s from the State University of New York at Binghamton, her master’s and a PhD in clinical psychology from Northwestern University in Evanston Illinois. Today is she an associate professor in the Department of Psychology of the Weissman School of Arts and Sciences at Baruch College/CUNY.

“I look at sleep deprivation,” she continues. “It’s a bigger problem now than fifty years ago. We now have computer screens and phone screens that have blue light in them, and they stimulate the part of the brain called the suprachiasmatic nucleus, which keeps us alert. That can be very good if you want to be awake, but it is not good if you want to go to sleep.”

One wonders how this problem affects our daily lives and the choices we make. “We make the easier choices. That’s problematic, especially if people are sleep-deprived and have to make critical decisions,” says she. “Right now we’ve been doing some interesting projects at Baruch College. We’ve been working with the volleyball athletes to explore their sleep, to watch their sleep, and to watch their performance with and without a nap. So far, we haven’t collected a whole lot of data: we have data on six athletes. But it seems clear to us that nap-taking in the middle of the day is helpful to their self-esteem but also to their self-efficacy, which means their belief that they can do things well and their performance on short-effort tests.

But do we all have the same needs when it comes to sleep? “Everyone is different and what people need is different,” says Engle-Friedman.



Dr. Engle-Friedman at her office.

Photo by Shoval Tshuva

“Some people need four hours, six hours, ten hours, and that’s true of many species. Not every species of fruit-fly or even every species of rodent has the same time sleep duration. The issue is how much you get relative to what you need. If you think you need eight hours and you are getting eight hours, your performance is generally better. If you need six hours, and you get six, you are okay. If you need eight and you get six, that’s not so good.”

And it is not only about total sleep but also about the continuity of sleep. “With sleep treatment, helping people to fall asleep is not all that difficult if they have trouble falling asleep. Staying asleep is very challenging. We know that if you are not a good sleeper, and you take a nap in the afternoon, that will interfere with your ability to have consistent sleep through the night. We want to help people not take naps if that is going to interfere with their nighttime sleep.”

Obviously, drugs are not necessarily the best solution. “Drugs have side effects of all sorts. My first recommendation would be never to take drugs. If you follow the cognitive-behavioral interventions, or CBTI, cognitive-behavioral therapy for insomnia, that is really a good way to go. Exercise is very important; watching what you are eating is very important too,” says she.

People who have insomnia issues often report that they tend to have really bad dreams just before waking up. Why is that? “The last sleep periods of the night have very robust REM (rapid eye movement) periods. They are long, and they have bold, gorgeous eye movements during the REM period. That’s when we have most of our dream activity. During this time, we have a loss of muscle tone, so we are not able to act out our dreams, generally speaking. People can have these very vivid dreams. It’s the

sensation and the awareness of not being able to move. That can be incredibly frightening.”

Another area of great interest for Engle-Friedman is environmental protection. Is she alarmed or just concerned about what is going on in the world? “I think we need to be activated. I think it’s time for us to take action, and we can’t rely on the Federal government right now, but state and local governments are taking it up. We know that is happening in New York, in New Jersey, and in California; it is happening across the country. We know that there are energy companies across states that have joined together to have carbon limits and to effectively get a cap and trade or carbon credit system in different groupings of states around the country. States are taking the lead, companies and corporations are taking the lead too.”

As a psychologist, does she think that we humans have a problem in realizing the danger we are facing in the immediate future? “We have a very tough time imagining the future and preparing for the future, and it’s called temporal discounting. One of our studies in our lab is to try to find a way for people to be more engaged with the future. To think, ‘I am going to be in the future, and what is the future going to look like for me?’ So we are trying to help people imagine themselves in the future. So far, in our preliminary data, it looks like people are starting to feel closer to themselves when they think of themselves in the future. Interestingly, in that data, if you ask people to think about themselves in the present, that actually interferes with their ability to do things like save for the future or try to do things that would be environmentally protective. If you are focused on the present, it interferes with thinking about the future.”

Aldemaro Romero Jr. is the Dean of the Weissman School of Arts and Sciences at Baruch College of the City University of New York. The radio show on which these articles are based can be watched at: <https://vimeo.com/296721414> He can be contacted via Aldemaro.Romero@baruch.cuny.edu