## FSU assistant professor finds connection between weight gain and impulsive behavior

May 22, 2013 | Written by Jordan Culver

Finding a connection between weight gain and impulsive behavior was the easy part — it only took a few surveys and about a decade of research. The tricky part, according to Dr. Angelina Sutin, is figuring out what to do next with the information.

Sutin, an assistant professor at Florida State University's College of Medicine, and her colleagues with the National Institutes of Health (NIH), recently examined data from a decade-long survey of Baltimore residents and found people from the survey who showed at least a 10 percent increase in weight also showed an increase in impulsiveness and a greater tendency to give into temptation.

"We know a great deal about how personality traits contribute to weight gain," Sutin said. "What we don't know is whether significant changes in weight are associated with changes in our core personality traits. Weight can be such an emotional issue — we thought that weight gain may lead to long-term changes in psychological functioning."

The study included more than 1,900 people who answered questions about their behavior. Those who gained weight also reported increased deliberation, meaning they thought more about their actions before taking them.

Researchers who worked with Sutin agreed the data suggests even though people who gain weight are conscious of their decision-making, they have trouble saying no to temptations. Becky Fanguy, the coordinator of Capital Regional Medical Center's Bariatric Clinic, said weight gain is either an emotional response to outside influences or a physiological response, which can't be helped.

The impulsive behavior comes from the emotional response.

"The cause of most weight gain is people are eating too many carbohydrates and eating too much food," she said. "Carbs act on the same part of the brain that alcohol, cigarettes or any type of addiction would act on. It activates endorphins and that makes you feel good."

Sutin said her findings don't definitively say if weight gain causes impulsive behavior or if it's the other way around. She did say the correlation between body and mind is certainly worth further research, though.

"If mind and body are intertwined, then if one changes the other should change too," she said. "That's what our findings suggest." Impulsive behavior is a by-product of most addictions, reports the Centers for Disease Control and Prevention. Sutin said the data suggests people who gained weight were probably subject to negative responses from friends and family members. This means they thought more about the foods they ate, but gave in to temptation anyway.

Fanguy said beating a food habit is a lot like trying to get over an addiction to alcohol, cigarettes or drugs.

"It's the exact same as trying to kick an alcohol or cigarette habit," she said. "You have to do behavior modification. You have to help people recognize what they're doing. They have to have a desire to want to stop."