## Weight Gain Linked With Personality Trait Changes

May 06, 2013

People who gain weight are more likely to give in to temptations but also are more thoughtful about their actions, according to a new study published in *Psychological Science*, a journal of the <u>Association</u> for Psychological Science.

To understand how fluctuations in body weight might relate to personality changes, psychological scientist Angelina Sutin of the Florida State University College of Medicine and colleagues at the National Institutes of Health (NIH) examined data from two large-scale longitudinal studies of Baltimore residents.

"We know a great deal about how personality traits contribute to weight gain," said Sutin. "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 studies, NIH's Baltimore Longitudinal Study of Aging (BLSA) and the Baltimore Epidemiologic Catchment Area (ECA) study, included more than 1,900 people in total, of all ages and socioeconomic levels. Data about participants' personality traits and their body weight were collected at two time points separated by nearly a decade. In one study, a clinician measured participants' weight at the two time points; in the other study, the participants reported their weight at baseline and had it measured by a clinician at follow-up.

Sutin and colleagues found that participants who had at least a 10 percent increase in body weight showed an increase in impulsiveness — with a greater tendency to give in to temptations — compared to those whose weight was stable. The data don't reveal whether increased impulsiveness was a cause or an effect of gaining weight, but they do suggest an intimate relationship between a person's physiology and his or her psychology.

In a surprising twist, people who gained weight also reported an increase in deliberation, with a greater tendency to think through their decisions. Deliberation tends to increase for everyone in adulthood, but the increase was almost double for participants who gained weight compared to those whose weight stayed the same.

"If mind and body are intertwined, then if one changes the other should change too," Sutin said. "That's what our findings suggest."

Sutin and colleagues speculate that this increase in deliberation could be the result of negative feedback from family or friends — people are likely to think twice about grabbing a second slice of cake if they feel that everyone is watching them take it.

These findings suggest that even though people who gain weight are more conscious of their decisionmaking, they may still have difficulty resisting temptations.

"The inability to control cravings may reinforce a vicious cycle that weakens the self-control muscle," the researchers note. "Yielding to temptation today may reduce the ability to resist cravings tomorrow. Thus, individuals who gain weight may have increased risk for additional weight gain through changes in their personality."

Co-authors are National Institute on Aging researchers Paul Costa, Wayne Chan, Yuri Milaneschi, Alan Zonderman, Luigi Ferrucci, and Antonio Terracciano, also at Florida State University College of Medicine; and William Eaton of Johns Hopkins Bloomberg School of Public Health.

The research was supported by the Intramural Research Program of the National Institute on Aging and a grant from the National Institute on Drug Abuse.