New Study Shows Why Women Are More Susceptible to Eating Disorders

By Meghan Goddard on October 17, 2016

Statistics have shown that body dissatisfaction and eating disorders are more common in women than men. Scientists and nutritionists have wondered if this is due to certain societal pressures, some biological component, or a combination of both. The Department of Psychology at York University in the UK recently published a study showing that women actually show increased brain activity related to negative body perception over men (Whiteman).

NEDA, National Eating Disorder Association, reports that in the U.S., there are 20 million women compared to 10 million men, suffering from clinically significant eating disorders at some point in their lifetimes. These eating disorders include anorexia nervosa, bulimia nervosa, binge eating disorder, and other specified feeding or eating disorder, but only those reported and registered in a clinic. This does not include those going undiagnosed. Eating disorders have been linked to mortality, especially high suicide rates (National Eating Disorder Association).

Dr. Catherine Preston of the York University study believes body dissatisfaction is an underlying factor effecting high rates of eating disorders in women. The study showed that society does contributes to how both men and women negatively perceive themselves. Preston believes women are more susceptible to these social pressures (Whiteman). With media displaying women to want to look a certain way, and dieting industries taking over the advertising world, these social pressures seem inescapable.

Because there is so little research on the biological predispositions to eating disorders, Dr. Preston and colleagues conducted a study to test neural activity associated with negative body perception. The study consisted of participants with no history of eating disorders. Sixteen men and sixteen women participants wore a virtual reality headset. This headset made it appear as if they had a specific body shape. Participants were poked with a stick at the same time it was shown the virtual body was. This helped to better perceive the virtual display as their own body. This was done for different versions of slim and obese body types. While they looked at and processed their “new bodies” their brain activity was measured via MRI (Whiteman).

The results supported Dr. Preston’s hypothesis. When both the men and women observed their virtual bodies, brain activity was seen in the parietal lobe. This lobe has an association area of body perception. Activity was also seen in the anterior cingulate cortex (Whiteman). This brain region is in connection with the limbic system and prefrontal cortex, meaning it relates to both the emotional and cognitive integration. It has been seen to relate to maladaptive behaviors to control and regulate painful emotions. This often results in motivation toward negative behaviors, including substance abuse, suicide, and eating disorders as coping mechanisms to these emotions (Hurley, et al.). As hypothesized, they found that this brain activity was more prominent in women than in men. This can be interpreted to show that women have more body dissatisfaction when they were perceived to have an obese body, than in men. Not only does the study show links between gender and body perception, but also shows why often our emotional responses regarding these emotions are harmful (Whiteman).

Although this is interesting in showing neural responses, I don’t think it shows that body perception is entirely biological. Our social perceptions may be what causes us to associate obese bodies with negative emotions. As someone who has followed studies in eating disorders and body confidence in young women, I believe social aspects have the biggest negative influence on body perception. When women have social standards to have a certain body shape and act confident, it creates this ideal, unreachable image and looks down on anything but it. This perception of the ideal woman mixed with parts of the brain that link negative response to these emotions, can result in deadly consequences. This is something to be cautious about and know when to recognize signs of eating disorders in family and friends. The more we learn about these disorders, the more I hope we can help people from suffering. More than twice the amount of women may be suffering, but 10 million men is still a huge number. Dr. Patterson says they are performing further research on eating disorder’s effect on women (Whiteman). Hopefully this will lead to a way to scientifically decrease these negative perceptions in both men and women. In the meantime, we can do the most we can to sway society from creating this ideal body image and learn to help those who need it.

National Eating Disorders Association. "Get The Facts On Eating Disorders." *National Eating Disorders Association*. NEDA, 2016. Web. 17 Oct. 2016.

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