

The mind of an eating disorder patient

[Business](#)



“ Up to 24 million people of all ages and genders suffer from an eating disorder in the U. S.” (Eating 1). In addition, only thirty to forty percent of all eating disorder patients are able to achieve a full recovery from their particular eating disorder (Eating Disorder).

There are three major types of eating disorders. Anorexia Nervosa is an eating disorder in which a person starves himself out of the fear of becoming overweight (Mayo Clinic Staff 1). Bulimia Nervosa is a disorder in which a person “ binges and purges.” People with this disorder eat a lot of food at one time and then try to get rid of it by exercising excessively, using laxatives, or vomiting (Free 1). A binge eating disorder is a disorder in which a person eats an unhealthy amount of food in order to deal with their emotions (Binge 1). There has not been enough focus on the biological causes of eating disorders but rather more of a focus on the environmental factors.

There are biological causes for eating disorders, such as abnormal chemicals in the brain. Abnormal levels of neurotransmitters in the brain and a damaged hypothalamus can actually be a cause for eating disorders. Although environmental and psychological factors contribute to eating disorders, abnormal neurotransmitter levels in the brain can also complicate the equation; therefore, treatment plans should be modified to take into account the brain and its impact on the chemical balances in the body. Eating disorders are not just caused by environmental factors; hereditary factors may also influence a person’s susceptibility for developing an eating disorder. It has been discovered that identical twin sisters are more likely to develop the same eating disorders (Hirst par.

4). This is because they share the same DNA. The discovery that identical twins develop the same eating disorders show that there must be genetic factors for eating disorders, and that there are certain genes that cause eating disorders. According to another study, twins were found to develop the same eating disorders because of chromosomes related to eating disorders (“ Eating Disorders” par. 10). There are chromosomes that have been found that are linked to eating disorders, showing that there are genes for eating disorders in DNA.

These chromosomes associated with eating disorders can be passed down from one generation to the next, causing the next generation to be more likely to develop an eating disorder. Anorexia has been found to be eight times more likely to develop in someone with family members who suffer from the disorder (“ Eating Disorders” 1). This shows that there is a link between developing an eating disorder and having a family member who suffers from an eating disorder. This may have to do with the fact that there are chromosomes found to be linked to eating disorders because the person suffering from the eating disorder inherited the eating disorder from a family member who also suffers from an eating disorder. Because of the evidence that eating disorders are hereditary, there was a lot of research done on the genetic factors of eating disorders. In fact, a genetic linkage on Chromosome 1 for Anorexia Nervosa was found by researchers (De Angelis par.

1). This discovery supports the idea that genetics have an impact on the development of eating disorders. Researchers have found a specific chromosome that is related to eating disorders, which gives substantial evidence that eating disorders are genetic. People who have family members
<https://assignbuster.com/the-mind-of-an-eating-disorder-patient/>

with eating disorders can also be influenced by the behaviors that their family member with the disorder shows. People who are already susceptible to eating disorders may be around parents with the disorder, “ the same parents who may be passing down genes that influence liability to eating disorders may also be modeling eating disordered behaviors (e. g.

, restriction, compulsive exercise), and attitudes (e. g., body dissatisfaction, drive for thinness) to their children” (Mazzeo and Bulik). People that are genetically prone to an eating disorder can be influenced by the behavior of a family member with the disorder. Eating disorders can also be caused by abnormal levels of neurotransmitters in the brain such as, serotonin and dopamine in the brain and a damaged hypothalamus, a part of the brain that produces hormones. Abnormal levels of dopamine in the brain play a part in the development of an eating disorder.

In a study it was discovered that binge eaters had a spike of dopamine when shown food similar to the spike of dopamine a drug addict gets when shown drugs (“ Binge” par. 2). This discovery reveals that binge eaters are addicted to food in a similar way that drug addicts are addicted to drugs. Dopamine also controls what a person finds enjoyable (Mandal 1). A person with an eating disorder may find eating more enjoyable or less enjoyable than someone without an eating disorder because they have abnormal amounts of dopamine. This may cause someone with an eating disorder to eat not to satisfy hunger, but for pleasure.

Dopamine has also been found to be linked to addiction and reward passages in the brain. Eating disorders are addictive disorders and a person

with an eating disorder may feel accomplished about losing a certain amount of weight or about eating more (“Addiction” 1). The reason why eating disorders are so addictive is because they are linked to reward passages in the brain; eating disorders become addictive because the dopamine pathways in the brain are not functioning as they should and the body therefore feels as if it needs more or less food than it actually does (Weiman 1). Abnormal levels of serotonin in the brain also play a role in eating disorders. And it has been found that people that suffer from eating disorders had serotonergic passages that are not functioning properly (“The Role” par.

1). This makes a person more likely to develop an eating disorder because having abnormal levels of serotonin can make a person more anxious or depressed, which may cause them to eat more to deal with their emotions. When tested people had abnormal levels of serotonin after being treated for an eating disorder (Boyles 1). This shows a correlation between eating disorders and the behaviors associated with eating disorders and abnormal amounts of serotonin in the brain. Also, the levels of serotonin may account for the different behaviors of people with eating disorders.

If someone with an eating disorder has low levels of serotonin, he or she may eat more to raise his or her serotonin levels and make him or herself feel less depressed. If someone with an eating disorder has high levels of serotonin, he or she may eat less because they are more paranoid and anxious about gaining weight. Having a hypothalamus that is damaged can also cause an eating disorder. The paraventricular hypothalamus is responsible for cravings (Boeree par. 3).

<https://assignbuster.com/the-mind-of-an-eating-disorder-patient/>

If someone's hypothalamus is damaged, he or she may crave food more or less than someone who does not have an eating disorder and a hypothalamus that is functioning properly. Someone with an eating disorder may eat more or less food than they actually need due to these abnormal cues. When a person's hypothalamus is damaged the person's appetite is affected because the level of chemicals being released is not correct so the person's cues to eat are not correct ("Hypothalamic" 1). The hypothalamus plays a significant role in hunger and in eating disorders. Some people may say that eating disorders are strictly caused by environmental factors; however, that is not true.

Researchers have realized that there are also biological factors causing eating disorders and have done studies and research on these factors. Brain imaging is being used to find causes of eating disorders and ways to improve treatment for them ("Brain" par. 3). Studies have been done using a positron emission tomography, or PET. This is a machine that allows scientists to see into the brain. Researchers have used PET scanners for various studies to research and discover biological and environmental factors of eating disorders.

Researchers studied a group of recovered anorexics and a control group using a PET scanner and found that the recovered anorexics had low levels of dopamine ("Anorexia" 1). Researchers have been able to use PET scanners to discover and prove that there are not just environmental factors for eating disorders, but biological and genetic factors as well. Eating disorders are not just caused by environmental factors, and according to a study, eating disorders are heritable and more common among Caucasians <https://assignbuster.com/the-mind-of-an-eating-disorder-patient/>

(Chamorro-Premuzic par. 3). Studies showing that eating disorders are hereditary debunk the theory that environmental factors are the sole cause for eating disorders. Eating disorders are not strictly environmental because the studies have shown that there are Chromosomes that are linked to eating disorders, which shows the biological and genetic side of eating disorders.

Eating disorder sufferers may pick up habits from family members with an eating disorder, but they are more likely to pick up on these unhealthy behaviors and develop an eating disorder because they are already more susceptible to developing an eating disorder because of the genetic and biological causes for an eating disorder that they have already inherited. Although environmental factors may influence and trigger an eating disorder, but they are not the sole causes for the development of an eating disorder. There are many different types of treatments that can be used to treat someone with an eating disorder. A treatment that is being used now to treat eating disorders is cognitive behavioral therapy. Cognitive behavioral therapy is the most common treatment for eating disorders (“ Eating Disorder Treatment” 1).

“ Cognitive behavioral therapy (CBT) is a form of treatment that focuses on examining the relationships between thoughts, feelings, and behaviors” (“ Treatment” 1). Cognitive behavioral therapy teaches eating disorder patients how to deal with their emotions themselves instead of turning to food to make themselves feel better. Another treatment being used currently are anti-depressants. Anti-depressants can be used to reduce bingeing and purging, depression, and anxiety or Obsessive Compulsive Disorder, or OCD

<https://assignbuster.com/the-mind-of-an-eating-disorder-patient/>

(Mayo Clinic Staff 1). Anti-depressants cannot treat the disorder as a whole, but it can treat some of the behaviors of the disorder and make the disorder more manageable and easier to treat.

The use of anti-depressants have been shown to help people with bulimia, but did not really have as much of an effect on patients who suffered from anorexia nervosa (Eating Disorders 1). There are also other forms of treatments that are not being currently used, but may be effective. These treatments are more natural treatments that can be used to help chemical imbalances in the brain and behaviors of eating disorders. One of these treatments is amino acids. Amino acids can be used to counteract abnormal amounts of chemicals in the brain.

People with eating disorders can use Amino Acid Therapy, eating a high-protein diet to balance neurotransmitters in the brain (“ Amino” 1).

Supplements for amino acids can be used to counteract abnormal levels of dopamine and serotonin in the brain of someone who suffers from an eating disorder (“ Amino” 1). Amino Acid Therapy can help balance the abnormal levels of dopamine and serotonin that may be causing the eating disorder. This form of treatment is a natural treatment that seems to be affective and helps solve the root of the problem for the eating disorder. Another form of treatment for an eating disorder that does not include medication is acupuncture. Acupuncture has actually been proven affective with the treatment of eating disorders.

Since there are underlying problems that go along with eating disorders, acupuncture can be used as treatment to eliminate those issues.

Acupuncture is similar to anti-depressants in the treatment of an eating disorder because it is not used to treat the whole disorder, but to treat certain behaviors of the eating disorder that make it harder to treat.

Acupuncture has proven itself effective, and “ in a study performed by Guo Ke Ren, 30 cases of anorexia were treated with acupuncture to specific medians for 30 minutes; after treatments, 25 cases were resolved and 5 responded with improvement, with an effectiveness rate of 100%” (Fletcher par. 3). Acupuncture either helped treat the cases or helped the patient improve in their recovery showing that acupuncture is an effective treatment for eating disorders.

Eating disorders are not just caused by environmental factors, and the biological factors of eating disorders need to be acknowledged more to make treatments more effective. Treatment plans should be altered to take abnormal neurotransmitter levels in the brain and other biological causes for eating disorders into account. Anorexia Nervosa has a ten percent mortality rate, causing eating disorders to claim more lives than any other mental illness (Eating 1). The biological side of eating disorders needs to be brought into light. There are medications and natural ways to treat them that can address the chemical imbalances in the brain that can lead to these disorders.

Lynn Crilly, a therapist that works with people suffering from eating disorders, said “ Eating disorder sufferers cannot be told to ‘ pull themselves together’, to ‘ stop doing that’ or to ‘ just eat’”(Crilly 1). It is not enough to solely focus on the environmental factors of an eating disorder. The biological factors of these dangerous and tragic disorders need to be

<https://assignbuster.com/the-mind-of-an-eating-disorder-patient/>

addressed in order to successfully treat them. Bibliography “ Amino Acids.”
Neurologistics. N.

p., n. d. Web. 31 Mar.

2014. “ Anorexia, Dopamine, and Experimental Confounds.” Neurotic
Physiology. N. p., n.

d. Web. 31 Mar. 2014. “ Anorexia Nervosa.

” Mayo Clinic. N. p., n. d. Web.

31 Mar. 2014. “ Are Eating Disorders Heritable?” Psychology Today. N. p., n.

d. Web. 31 Mar. 2014. “ Binge Eating Disorder.

” HelpGuide. org. HelpGuide. org, n. d. Web.

31 Mar. 2014. “ Binge Eaters’ Dopamine Levels Spike at Sight, Smell of
Food.” BNL Newsroom. BNL, 18 Feb.

2011. Web. 2 Apr. 2014.

bnl. gov/newsroom/news. php? a= 11233>. Boeree, C. George.

“ Hunger and Eating Disorders.” General Psychology. N. p., n. d.

Web. 31 Mar. 2014. Boyles, Salynn. “ Brain Chemical May Be Key in Eating
Disorders.

” Fox News. FOX News Network, 07 Sept. 2005. Web. 31 Mar. 2014.

<https://assignbuster.com/the-mind-of-an-eating-disorder-patient/>

“ Brain Imaging Studies.” Eating Disorders Center for Treatment and Research. University of California, n. d. Web.

31 Mar. 2014. “ Bulimia.” The Free Dictionary. Farlex, n. d.

Web. 31 Mar. 2014. Calabro, Sara. “ Can Alternative Therapy Treat Eating Disorders?” EverydayHealth. com. N. p., n. d. Web.

31 Mar. 2014. Crilly, Lynn. “ Lynn Crilly Quotes.” Goodreads. N.

p., n. d. Web. 31 Mar. 2014.

Davis, Caroline. “ Addiction and the Eating Disorders.” Psychiatric Times. N. p., 1 Feb.

2001. Web. 31 Mar. 2014. DeAngelis, Tori. “ A Genetic Link to Anorexia.

” American Psychological Association. N. p., n. d.

Web. 31 Mar. 2014. “ Eating Disorder Statistics.” South Carolina Department of Mental Health. N.

p., n. d. Web. 31 Mar. 2014.

“ Eating Disorders Statistics.” ANAD. National Association of Anorexia Nervosa and Associated Disorders, 2014. Web. 2 Apr. 2014.

. “ Eating Disorder Treatment and Recovery.” HelpGuide. org.

HelpGuide. org, n. d. Web. 31 Mar. 2014.

“ Eating Disorders.” University of Maryland Medical Center. University of Maryland, n. d. Web.

31 Mar. 2014. Fletcher, Michelle. “ Fight Eating Disorders with Chinese Medicine.” Pacific College of Oriental Medicine. N.

p., n. d. Web. 31 Mar.

2014. Hirst, Jeremy. “ Biological Causes of Anorexia Nervosa and Bulimia Nervosa.” Serendip. N. p.

, n. d. Web. 31 Mar. 2014. “ Hypothalamic Obesity (HyOb).

” Cincinnati Children’s. N. p., n. d. Web.

31 Mar. 2014. Mandal, Ananya. “ What Is Dopamine?” What Is Dopamine? N. p.

, n. d. Web. 31 Mar. 2014.

Mayo Clinic Staff. “ Eating Disorder Treatment: Know Your Options.” Mayo Clinic. N. p.

, n. d. Web. 31 Mar. 2014.

Mazzeo, Suzanne E., and Cynthia M. Bulik. “ Environmental and Genetic Risk Factors for Eating Disorders: What the Clinician Needs to Know.” National Center for Biotechnology Information.

U. S. National Library of Medicine, 29 June 0005. Web. 31 Mar.

<https://assignbuster.com/the-mind-of-an-eating-disorder-patient/>

2014. “ The Role of Serotonin In Eating Disorders.” National Center for Biotechnology Information. U. S. National Library of Medicine, n.

d. Web. 31 Mar. 2014. “ Treatment and Services.

” NAMI. NAMI, n. d. Web. 31 Mar.

2014. Weiman, Shannon. “ Dopamine & Appetite.” LIVESTRONG. COM.

LIVESTRONG. COM, 16 Aug. 2013. Web. 31 Mar. 2014.