

The “Mad Genius”: Is there a correlation between creativity and mental illness?

Introduction

Western civilization has created the stereotype of the supposed “mad genius”. It has often been assumed that creativity correlates with mental illnesses, specifically manic depression. The behavior of creators such as Vincent Van Gogh, Virginia Woolf, and Pyotr Il'ich Tchaikovsky gives the theory cultural weight but is there any psychological ground? As psychologists have discovered more and more about the human brain, studies have begun to yield conclusive results. If there is a connection, society may need to rethink the treatment of mental illnesses. Is it ethical to treat artists whose work may stem from their disease?

Part I: Characteristics of Manic Depression

Manic depression or bipolar disorder is a mood disorder characterized by cycling periods of highs (mania) and lows (depression) (Evening Telegraph). It is caused by a variety of environmental, genetic, and neurochemical factors, although no

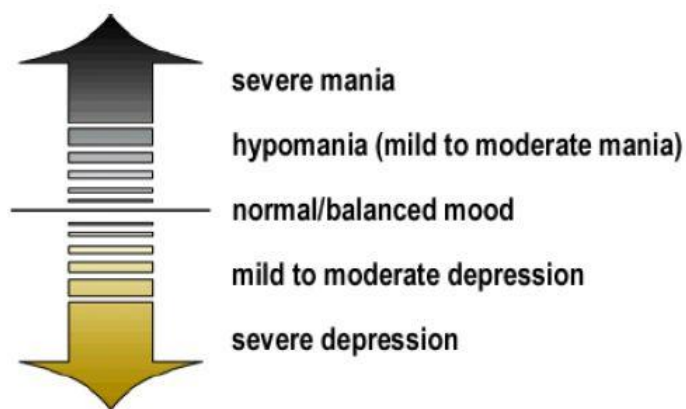


Figure 1- The varying severity of bipolar disorder symptoms

specific cause is presently known (Agarwal). Bipolar disorder is thought to be a biological disorder, specifically dealing with a discrepancy in chemical messengers called neurotransmitters (Agarwal). High or low levels of dopamine, serotonin, or norepinephrine can contribute to the cause of bipolar disorder (Read). At the same time, other studies show that it may be an imbalance of one neurotransmitter in proportion to another that causes the disorder (Read). Problems may also stem from the endocrine system; half of bipolar patients who have rapidly

cycling moods have a condition known as Hypothyroidism, which causes low levels of the thyroid hormone (Nemade and Dombeck). High levels of the thyroid hormone (Hyperthyroidism), which causes mania, can be eased by lithium. (Nemade and Dombeck).

Bipolar disorder also tends to be genetic and can run in the family (Agarwal). Around half of the people who have bipolar disorder also have a family member with a mood disorder, although not necessarily bipolar disorder (Agarwal). If one has a parent with the condition, they have a 15 to 25 percent chance of having it as well (Agarwal). If, in a set of non-identical twins, one individual has bipolar disorder, the other has a 25 percent chance of having it (Agarwal). With genetically identical twins, the risk for having the illness is even higher at around 8 times the chance of fraternal twins (Agarwal). How does this correspond with artists? Studies suggest that a predisposition for bipolar disorder and for creativity can be genetically inherited (Megatulski). Creativity tests among the first-degree relatives of bipolar patients are generally higher than that of the control group, even though the patients themselves may not have as high of a level of creativity (Megatulski). While a link between bipolar disorder and creativity can be found through genetics, why does it seem that mental illness is more prevalent among artists?

The answer to this question is that proportionally, a larger percent of people involved in creative professions have been diagnosed with bipolar disorder compared to others working in non-creative professions (Megatulski). In one 30-year study, the overall results showed that individuals in creative professions had a higher rate of psychosis, substance abuse, mood disorders, and attempted suicide (Megatulski). It is not to say that artists are generally bipolar but rather that there are higher rates of the illness within the profession in comparison to other areas of work (Megatulski).

Genetically, creativity is higher among the relatives of those afflicted with manic depression, which asks the question if creativity is a symptom of bipolar disorder or if bipolar disorder is a symptom of creativity. It has also been shown that a higher percentage of creative professionals have a form of mental illness in comparison to other non-creative professionals. But what does the brain have to say about the connection? Why does this effect occur?

Part II: Neurochemistry of Manic Depression and Creativity

The link between manic depression and creativity can be illustrated by the frontal lobe of the brain, the primary connector between the temporal and parietal lobes, which deal

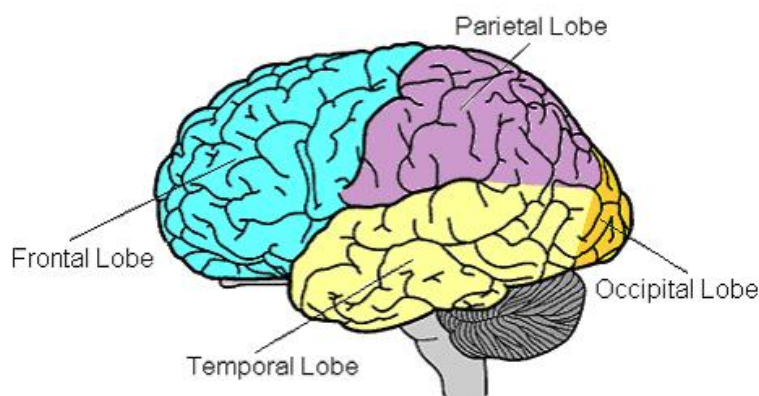


Figure 2- The lobes of the brain associated with bipolar disorder

with the relay of knowledge and concepts (Sussman). Manic depression results in strange activity in the frontal lobe, specifically in the prefrontal cortex; hyperactive behavior in the region during manic periods can result in the drawing of unusual conclusions between seemingly unrelated ideas (Sussman). The characteristic chemical imbalance of manic depression results in cycling of norepinephrine levels in the frontal lobe, high levels being responsible for depressive symptoms and low levels resulting in manic symptoms (Sussman). The manic symptoms spawn unique connections in the brain, which can lead to creative and odd ideas. Due to the compromised functionality of the frontal lobe, risk-taking and unrestrained behavior often take place, which is a step to innovation (Megatulski). Outside of creative conclusions that may be drawn during a manic state, the brain states between the side effects of mental illness and creativity are actually

the same; it too involves unusual frontal lobe activity (Sussman). Atypical dopamine levels in the brain, which can cause schizophrenic symptoms, also positively impact the creative drive (Sussman). While it is difficult to predict and explain how the symptoms of a mental illness may spawn creative ideas in an artist, manic depression has recognizable effects in this process.

Manic periods generally result in inspiration and activity, leading to large artistic outputs and the creation of pieces that may seem insurmountable in other brain states (Sussman). Some artists see the depressive phase as the deep insight that shapes their work; Kay Jamison states, “Many artists and writers believe that turmoil, suffering, and extremes in emotional experience are

integral not only to the human condition but to their abilities as artists” (Sussman). A famous Romantic era composer, Frederic Chopin (thought to have either depression or manic depression), said, “I wish I could throw off the thoughts which poison my happiness. And yet I take a kind of pleasure in indulging them,” offering insight into the supposed “suffering artist” who pours his strife into his work (Chopin). The respect for an artist’s work stems from more than an appreciation of exceptional technique, but also from insight into the artist and human nature, as well as innovative ideas and



Figure 3- Frederic Chopin, renowned composer and pianist

perspectives. But how much innovation would art see without the impact of mental illness? This question brings to mind the ethics of medicating mentally ill artists.

Part III: The Ethics of Medication

Many bipolar patients complain that medication stifles creativity as well as productivity, however if left untreated, full-blown manic depression actually damages creativity more than spawning it (Bauers). When the illness is too severe, creativity becomes sporadic and symptoms are often too detrimental to allow any expression at all (Bauers). At the same time, medication may not always be a solution, as it can cause adverse side effects that worsen symptoms. For example, in some people, antidepressants used to combat depression (another mood disorder) may result in a worsened mental state due to a reaction with the chemicals (O'Brien). Often times, bipolar patients stop taking medication because they miss the manic highs; for them, moods may be more consistent but not as energetic or productive (Jamison). At high levels, lithium medication may also result in personality changes including increased indifference, passive behavior, and a lessened response to one's environment (Jamison).



Figure 4- Lithium Carbonate, a typical drug for treating bipolar disorder

Not only are the ethics of medicating manic-depressive artists something to consider, but also the ethics of sterilizing and eradicating the mentally ill from the gene pool. Many Chinese provinces have required individuals with hereditary mental illnesses to be sterilized and, if pregnancy occurs, to have forced abortions (Jamison). During the Third Reich, tens of thousands of the mentally ill (including those diagnosed with manic depression) were either sterilized or killed (Jamison). But, without the sufferers of manic depression, what could be said for art? Would the artistic achievements and wonders that are admired today even exist? It may not be a

far-fetched conclusion to say that without delicate insanity, the art and music so enjoyed in the modern day would never be the same.

Conclusion

The idea of the “mad genius” and the “tortured artist” has long been accepted in Western society. An assumed correlation between true art and mental illness has almost become a self-fulfilling goal of artists. Artists of the Romantic Era were especially inclined to believe in this idea and Lord Byron, a Romantic poet, was quoted, “We of the craft are all crazy. Some are affected by gaiety, others by melancholy, but all are more or less touched” (Sussman). But there is some actual psychological and biological ground to this theory. The periods of mania brought on by manic depression may be responsible for the work of some of the most influential artists that are revered today. With this conclusion evidenced and in mind, society may seek for other ways to treat mental illness as we become more knowledgeable about the causes and effects of the illnesses. Is there merit to the suffering of the ill? Future research may let us know for sure.

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