Evolutionary Origins of Mental Disorders:

Overlooked Advantageous Survival Mechanisms

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Abstract

The stigma that accompanies mental disorders in the modern age contributes to the widely held belief that they are completely negative. However, based on Darwin's (1860) theory of evolution, it seems as though such a large flaw would have been made extinct by now. However, careful and meticulous research shows that the origins of many disorders, including obsessive-compulsive disorder (OCD), are in the far northern hemisphere. Here, it would have been advantageous to have the characteristics of a person with the modern concept of OCD. Conscientiousness, parsimonious, and future-oriented thought would have aided, not hindered, the survival of our ancestors. Other disorders, including mania and depression, share similar characteristics that could be considered evolutionarily advantageous. This is a stance that is rarely taken by individuals, including mental health professionals. However, such an approach offers a silver lining for society as a whole to consider, and this reconsideration of mental disorders thus must conclude that these disorders are more than just maladaptive behaviors.

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Mental illness was not always recognized as real, and in fact there are those who still doubt its existence (Corrigan & O'Shaugnessy, 2007). Even within the world of psychological professionals, there is some debate as to what the exact criteria are for certain disorders, as well as if certain disorders are real - i.e. dissociative identity disorder (Gipple, Lee, & Puig, 2006). Indeed, mental illness is still a contentious topic, though it is gaining traction slowly across the world. While acceptance of mental illness as a legitimate issue is slowly increasing (Mizock, Russinova, & Millner, 2014), mental illness seems to be all too often associated with negative events, such as school shootings and serial killers (Metzl & Macleish, 2015).

When portrayed in this light by the media, it seems understandable that mental illness would be seen with a largely negative connotation. Furthermore, the discrepancies by mental health professionals does not present the most compelling argument that mental disorders are a legitimate issue. However, through all of these debates, is it possible that we are missing something? According to Darwin's theory of evolution (1860), the basis of all science is that all living organisms are constantly evolving in an attempt to better ensure survival.

While not arguing that humans are at their evolutionary peak, it is fair to argue that humans as a whole have endured a relatively long evolutionary process. Therefore, why would such a blatant flaw such as mental illness have made it through the cracks? If mental illness was entirely bad, would not the "survival of the fittest" method have eliminated such a defect?

The answer to this question is perhaps quite simple. Despite the negative connotation and stigma placed on mental illness in modern times, is it possible that mental illness is actually an adaptive asset? In the United States, according the National Institute of Mental Health (2013a), at some point in their lifetime 18.5% of American adults will experience a mental disorder of some type. According to a more recent report by a Congressional Research Committee suggests that the number may now be as high as 25% (Bagalman & Napili, 2015). With one quarter of the entire American population (over 300 million people) suffering from one type of mental disorder or another in their lifetime, there must be an explanation for such a widespread prevalence.

Within the psychological world, disorders are often thought to either genetic or environmental origins. Keller and Miller (2006) attempted to determine whether mental illnesses are more reliant on genetic variations or environmental influences by analyzing three different genetically-based theories about mental disorders. With modern multipath models of mental disorders, the researchers determined that while it could be possible that evolution has not yet been able to weed out the genetic mutations that contribute to the development of mental illnesses, they theorized that perhaps the alleles involved are not seen as harmful from an evolutionary perspective.

While acknowledging that mental disorders are an impediment in many cases, and in the face of the negative stigma generally held by society towards mental illnesses, the current aim is to argue that mental disorders have persisted through evolution partly due to benefits that have been ignored by modern society. I will examine obsessive-compulsive disorder, depression, and

mania, all of which seem to have clear evolutionary and modern-day advantages, while a case is made to further research dissociative identity disorder and schizophrenia in order to determine if there is an advantageous reason for their existence.

Modern Outlook on Mental Disorders

Stigma

One of the biggest issues contributing to a negative stigma of mental disorders in modern American culture is the perceived connection between mass shootings, terrorists, serials killers, and mental disorders (Corrigan & O'Shaughnessy, 2007). Mental illnesses have been named at least partial causes in many of the mass shootings in America in the past decade. The shootings at Virginia Tech, Sandy Hook, and Umpqua Community College are just a few in the growing list of mass shootings in which American media in particular highlights the mental illness background of the perpetrator. With this as the general public's primary exposure to mental illness, the association with such a negative event understandably evokes negative attitudes towards the field of mental health.

This stigma is so severe that according to Corrigan, Barbara, Goldman, Slopen, Medasani, and Phelan (2005), adolescents view mental illness in a significantly more negative light than they view physical illnesses. This viewpoint by what is generally considered a liberal generation of youths is disturbing, as it signals that there is still a long way to go in separating mental health from its current negative stigma.

While this stigma impacts not only the consensus of the general public, it also has a negative impact on the perception of those who suffer from mental illnesses themselves. As

recently as 2013, the Center for Disease Control and Prevention reported that only 25% of the people in their studies who suffered from a mental disorder felt as though people in their everyday life were compassionate towards them and their situation, leaving three quarters of individuals with mental illnesses feeling at least a slight lack of acceptance.

Diagnosis

The bad.

Diagnosis of mental illnesses is a very controversial aspect of mental health for multiple reasons. With some of the mental disorders being fluid in nature and disagreed upon by even professionals in the field, diagnoses may often be inaccurate, rushed, or incomplete (Gipple, Lee, & Puig, 2006).

This skepticism surrounding the diagnosis of a mental health disorder is based heavily on the classic studies conducted by Rosenhan (1973). In the first round of his study, Rosenhan and seven colleagues feigned schizophrenic-like symptoms in order to gain admittance into psychiatric wards. Once admitted, Rosenhan and his colleagues acted completely "normal", attempting to see how long it took the medical staff to release them. Despite clearly being asymptomatic upon admittance, it took an average of 19 days for the patients to be released from psychiatric care.

To follow up, one hospital challenged Rosenhan to send pseudopatients through their system, claiming that they would easily be able to distinguish between healthy individuals and those with mental disorders. Subsequently, Rosenhan agreed to send these pseudopatients through sporadically. After multiple weeks, the hospital claimed to have identified 41 of their

new patients as a part of Rosenhan's study. However, much to the embarrassment of the hospital, it was revealed that Rosenhan had not sent in a single pseudopatient, further driving home his point: diagnosis and subsequent treatment is not an exact science and therefore is prone to error.

In addition to the volatility within the world of diagnosis, there are other negative aspects that some have argued accompany a diagnosis of a mental disorder. Walker, Seligman, and Rosenhan (2001) identified a plethora of dangers that can come from officially diagnosing a patient. For one, by diagnosing a patient with a certain disorder, it provides them with an excuse or defense for any irreverent or irresponsible behavior. This can lead to an even more capricious attitude than the patient had prior to their diagnosis.

In addition, based on the studies by Rosenhan (1973), Walker, Seligman and Rosenhan (2001) suggested that diagnosis is irresponsibly limiting. As the diagnosis of mental disorders is not based on an exact science or formula, a single case can be interpreted by ten different psychologists as ten different specific disorders. Furthermore, once a diagnosis is declared oftentimes doctor and patient will not continue to look for further possible diagnoses.

Finally, diagnosing a patient then places a label on them and subsequently makes them a target of negative stigma associated with the specific diagnosis. The previously mentioned stigma can take its toll on those with mental disorders and lessen their sense of support from people around them (Walker, Seligman, & Rosenhan, 2001).

The good.

While there are negatives associated with diagnoses, there is also research that indicates diagnoses can be positive. For example, Watson, Swan, and Nathan (2011) suggested that diagnoses can actually boost the quality of life (QoL) of some psychiatric patients. In their study, a large population of undiagnosed psychiatric patients completed a QoL survey prior to receiving psychiatric attention. In this initial testing, this group of soon-to-be diagnosed patients were significantly lower in their self-reported QoL compared to a control group that had no history of psychiatric-related issues. After diagnoses, patients underwent various forms of treatment. Upon completion of this treatment, the researchers found that the QoL increased for those who received therapy that discussed how to effectively deal with their diagnosis, which suggests competent therapy following a diagnosis is beneficial.

It is important to note that research such as that by Jansen et al. (2013) suggests that certain diagnoses may lead to an even further decrease in self-reported QoL, such as mood disorder diagnoses. In a mass random survey, individuals with mood disorders reported a lower QoL compared to not only the psychologically healthy individuals, but also compared to the other individuals with mental disorders. To make diagnosis a positive factor for clients in terms of their QoL, it is important that the subsequent treatment contain certain elements that aid the patient's actions and point of view, especially in mood disorder diagnoses.

What exactly does diagnosis and treatment do for patients that can help them increase their QoL? Lucock, Gillard, Adams, Simons, White, and Edwards (2011) suggest that this process can help the patient increase their self-care. While there are limitations within certain

treatment styles in the current mental health care system, this meta-analysis of studies regarding self-care determined the level of self-care is generally extremely low among those first entering therapy. An effective therapy treatment thus includes strategies to enact a form of self-care, as well as a form of accountability. By increasing the focus on self-care, patients' perceived QoL should increase.

The Present Argument

Obsessive Compulsive Disorder

The idea behind this paper first occurred due to personal experience with Obsessive-Compulsive Disorder (OCD). Beginning around the age of 5, my symptoms of the slowly became more apparent as I grew older until I was forced to seek help, first from a therapist and then from medication. These symptoms were ego-dystonic, negatively disrupting my life. Though unpleasant, I recently began to look at this from a different viewpoint: rather than seeing all of the bad and time-consuming behaviors that the disorder brings, I realized that there are in fact positives that can be taken from having OCD. These symptoms can be thought of as ego-syntonic, or being beneficial to life.

What is it?

Obsessive-compulsive disorder, with a lifetime prevalence of 1.6% (National Institute of Mental Health, 2014), is characterized generally by two different types of symptoms. As the name suggests, one of these categories is obsessions. According to Seligman, Walker, and Rosenhan (2001), the clinical definition of obsessions is "repetitive thoughts, images, or impulses that invade consciousness, are often abhorrent, and are very difficult to control." It is

important to note that these obsessions are not similar to the average stress that normal individuals face on a day to day. These obsessions are within one's mind, not from an outside source.

I can attest firsthand to the severity and obnoxious nature of these obsessions. Ranging from fears such as hurting a loved-one and having something bad happen to yourself or others, to unexplainable fallacies that objects must be counted, these obsessions can occupy a person's brain for hours on end, leaving them with no cognitive capacity for other functions.

In addition to obsessions, the second category of OCD symptoms is compulsions. These compulsions are often aimed at alleviating some of the stress felt by the aforementioned obsessions. Compulsions can manifest in numerous ways such as rearranging items in either symmetrical or asymmetrical patterns, counting objects, and repeatedly checking things. While obsessions are usually contained internally, compulsions are expressed generally expressed externally. This often leads to even further disruptions in daily life, and is also potentially socially embarrassing.

The bad.

There are many documented disabilities that people with OCD face on a daily basis. Piacentini, Bergman, Keller, and McCracken (2003) illustrated some of these when they ran surveys of children and adolescents, as well as their parents, who had previously been diagnosed with OCD. While a wide variety of OCD-related dysfunctions were reported, the most commonly reported were issues with attention in school, as well as issues with completing

homework on time. The idea of impairment in school and/or adult occupations as one of the top issues has been supported in other studies as well (Adams, 2004; Mancebo et al., 2008).

In addition to altering performance, OCD also has deliberate behavioral impacts on those who suffer from the disorder. Parkin (1997) analyzed behavior and found that people with OCD were likely to avoid certain situations or stimuli that they know may cause an OCD reaction. According to Koran (1996), this sometimes manifests with the appearance of a social phobia, as crowds are often a trigger for such anxiety.

Further ego-dystonic symptoms of OCD extend into level of affect or mood both in the person who suffers from OCD as well as the friends and family members around them. Many studies (Krebs, Bolhuis, Heyman, Mataix-Cols, Turner, & Stringaris, 2013; Lochner et al., 2014; Ruscio, Stein, Chiu, & Kessler, 2010) have examined the mood of individuals with OCD, comparing them to control groups of people with no psychiatric history whatsoever. Almost uniformly, the studies find a significantly lower general mood levels in those with OCD. Reasons for this can possibly be attributed to the added anxiety of the disorder's symptoms, the perceived embarrassment individuals face when compulsions are carried out around others, as well as the feeling of helplessness experienced by individuals with OCD.

As OCD impacts the individual, so too does it impact those around them. Research has demonstrated that both the family members and friends of individuals with OCD consistently exhibit lower levels of mood and morale than the average family members of individuals with no psychiatric history (Albert, Salvi, Saracco, Bogetto, & Maina, 2007; Stengler-Wenzke, Trosbach, Dietrich, & Angermeyer, 2004). While this is a correlational report, it is possible that this is

partly due to the depressed mood of the individual with OCD and their resulting behaviors causing stress for those around them similar to a chain reaction or domino effect.

The good?

In the critically acclaimed movie *Silver Linings Playbook* (2012), OCD is portrayed in a somewhat positive, motivating, and endearing light. The main character, Pat, suffers from a different debilitating mental disorder which makes him prone to outbursts of anger. Pat meets a girl named Tiffany, who suffers from depression and exhibits many symptoms of OCD. While both characters are attempting to get their lives in order, they bond through dancing. Neither of them are very good, but Tiffany obsessively drags Pat to practice with her, determined to compete in a dancing competition. At all hours of the day, she consumes both herself and Pat in practicing for this. While the two characters do improve some, they fall miserably short of winning anything at the competition. The audience is led to believe that the obsessive practicing and the resulting experience served as a distraction from other problems they were both having, improving their quality of life.

Though this movie is a fictional example, it made me think critically. While there are undoubtedly potential negatives that can come from obsessive and compulsive symptoms experienced through OCD, is it possible that some of these symptoms can, as the movie suggests, be beneficial?

I began examining this question from a personal standpoint. I know of the many struggles OCD has presented me with, but has it in any case provided me with something positive? One such thing that came to mind for me personally is the organization that stems

from my OCD. While I have seen many people around me struggle through college, forgetting deadlines and misplacing important reminders, I have never felt pressure or stress from approaching due dates. To me, this seems largely thanks to my organizational skills. I am so organized that I generally have all of my assignments done weeks in advance, and I obsess over getting them finished.

In addition, I always have a clean room. It is not uncommon for me to make my bed even if I am about to get right back in it to go to sleep. At school, I clean my apartment multiple times a week from top to bottom. For me, it is not at all because I am afraid of germs as is typical for individuals with OCD. Rather, I simply just obsess over having a clean room. To me, this is definitely a positive, as opposed to the multitude of college students whose rooms are so messy, people can end up lost.

However, I am only one data point. Perhaps I am just trying to find a positive aspect to the otherwise negative struggles that I have experienced, and this not a widespread view. What does the research say?

Unfortunately, there is not an overwhelming amount of research on this topic. In fact, it took me a while to uncover anything related to this topic. I was certain that I could not possibly be the only person with OCD who has found organization and determination to be strong points.

However, Steven Hertler has become a name synonymous with championing a different viewpoint of OCD. Hertler (2015a) first came up with an explanation of why OCD might have developed evolutionarily in the first place explaining it as an adaptive function rather than a disabling disorder.

First, Hertler explained three major symptoms of OCD and how they would have played a role in ancient human history. He argued logically and empirically how future oriented thought, parsimoniousness, and compulsive conscientiousness were adaptive traits in particularly harsh climates, specifically in northern areas, where seasons were and still are constantly changing.

Hertler (2015a) used complex and meticulous genetic evolutionary analysis to trace these behaviors to the extreme areas in both the northern and southern hemispheres. First, he argued that the future-oriented thought, a common product of OCD, was adaptive to the time constraints presented by these areas. With short days, limited time to hunt, gather, and relocate, those who lived in these regions would have been well-served obsessing over what their future held.

The conservation, often referred to as hoarding in OCD, likely began in a manner similar to what squirrels do with their acorns, explains Hertler (2015a). Just as squirrels collect and store acorns for winter and spring, so too did people in areas where seasons often changed store up food, water, and other living materials. Up until the modern industrial revolution, Americans were forced to do the same. By "hoarding" supplies, our ancestors were simply doing their best to ensure their own survival.

As Hertler (2015a) states , "compulsive conscientiousness" would have been advantageous in harsh climates to provide adaptive flexibility to the ever changing climate. Attention to detail in weather, environment, and personal health would have been at a premium without the technology that exists today.

Seen in this light, it can be seen how OCD has survived evolution as long as it has, not in spite of the negative impact it can have, but because of the survival mechanisms that it provides. Hertler (2015b) argues that mental illnesses such as OCD can go to extreme lengths of being primarily detrimental, mild symptoms of OCD should not emit therapeutic or medical reactions.

Hertler (2015a) further argues that while this evolved to aid survival in difficult situations that arose in more primitive times, there are still adaptive and constructive uses for the more mild symptoms of OCD in today's western world. For example, devotion to work or a hobby is not necessarily a negative. Depending on occupation, being devoted to a job could mean the difference between whether someone lives or dies, whether children receive an adequate education or not, etc. Is it possible to be overly devoted to any cause, and can in turn add dysfunction rather than production. However, in moderation the symptoms of OCD are potentially advantageous.

Hertler's research opens a new approach to OCD. Following this line of thought, is it rational to see how organizing or counting - common symptoms of modern OCD - may have actually developed as a means of survival. As Hertler (2015a**)** argues based on his research, obsessive traits such as these are not maladaptive, but rather productive. He argues that OCD developed as a way to conserve and defend the necessities for survival.

Hertler's research inspired me to view my own symptoms of OCD in a new light. However, data wins, and Hertler has so far failed to back his ideas up with empirical data from present-day cases of OCD. To test the hypothesis that OCD is based on survival mechanisms, Casado, Cobos, Godoy, Machado-Pinheiro, and Vila (2011) conducted a study comparing

individuals with OCD to a control group of individuals with no psychiatric history. In this study, participants were exposed to varying levels of emotional images and subsequently rated the pictures on level emotion, arousal, and dominance. The results of this study found significant differences in the way individuals with OCD interpreted and responded to the emotional images, where individuals with OCD reported higher emotion and arousal in the "less emotional" images than the control group. This study holds preliminary evidence that supports Hertler's theory.

Goncalves et al. (2015) conducted a brain imaging study with two groups, attempting to scientifically validate Hertler's claims that OCD is based on survival. While Casado et al. (2011) showed higher emotional reactivity among individuals with OCD, it remains to be determined where this emotional reactivity is classified. In the study by Goncalves et al. (2015), one group consisted of individuals with diagnosed OCD, while the other was a control group of individuals with no history of psychiatric disorders. Each group was subjected to sets of emotional images intended to activate the brain's defense and survival areas. There were multiple levels of emotional stimuli, ranging from basic threat to severe threat. The results showed that individuals with OCD exhibit significantly higher brain activation in response to threats than do individuals without OCD, most notably at the basic threat level.

Overall, there is substantial historical logic and modern scientific evidence to support the idea that OCD developed as a means of survival for ancestral humans, and research also suggests it still operates in a similar manner today. Though OCD symptoms are now treated as an illness in the clinical world, it is possible for individuals with OCD to glean positives from an otherwise negatively perceived disorder.

Depression

If obsessive-compulsive disorder can be seen as an adaptive set of behaviors now classified as a disorder, is it possible that other mental illnesses evolved in a similar manner? To determine if OCD is the exception, or perhaps part of a larger rule, I analyzed the general category of depressive disorders, with an emphasis on Major Depressive Disorder.

What is it?

While everyone will at some point experience low moods, clinical depression is a more severe impairing form of sadness. According to the DSM 5 (American Psychiatric Association, 2013), depression is having a marked sad or upset mood for most of the day for at least two weeks, though there are markers of severity from mild to severe depending on prevalence and duration of symptoms.

Oftentimes individuals with depression will be upset without apparent reason. When asked why they are upset or sad, the individual may or may not be able to explain. Those with depression often display behavior similar to that of an extreme introvert, lacking an expansive social life. In addition to mood, appetite, sex drive, and motivation can all be negatively impacted by depression (American Psychiatric Association, 2013).

The bad.

There are many different negative outcomes that appear to be correlated with depression, which is one of the most common mental health disorders - a lifetime prevalence generally cited in the double digits (National Institute of Mental Health, 2013b). One umbrella idea is that of learned helplessness (Telner & Singhal, 1984). The idea of learned helplessness is simple: a

person is conditioned into believing that nothing they do will matter or be successful, so they simply stop trying. Learned helplessness can manifest itself in many ways within depression, from reducing motivation to eat and be active to as far as an individual staying in bed all day long.

Decision making is another area that those with depression seem to struggle with (Hammen & Padesky, 1977). This is perhaps due to the learned helplessness aspect, with individuals who suffer from learned helplessness feeling like whichever decision they make, they will fail. In this situation, it may not be that they are incapable of making decisions, rather they just do not want to.

It is not uncommon for individuals with depression to develop somatic symptoms as well. According to Walker, Seligman, and Rosenhan (2001), depressed people often experience small hindrances such as pains and aches as well as insomnia, erectile dysfunction, and other physical maladies. Part of the physical issues may result from a lack of food intake: studies show that individuals with depression significantly reduce their food consumption (Paykel, 1977).

The good?

In the classic film *It's a Wonderful Life* (1946), the main character, George Bailey, exhibits many symptoms of depression. He believes that his life is horrible, and he has transformed from an loving and caring man to a grumpy and rude husband/father. In the film, George receives a visit from the angel Clarence who shows him how bad life could really be and that he is not as bad off as he believes. By the end of the movie, George's rumination and pondering of his life leads him to conclude that he could be much worse off. Within the context

of the movie, the viewers are led to believe that his depressive symptoms actually helped him overcome his depression. Once again, though fiction, this movie gave me a preliminary idea for how depression could be beneficial.

Just as with OCD, the way the modern world views depression is almost unanimously from a negative point of view. However, in 2010, John Lehrer of the New York Times wrote an article considering how depression may have evolved from a historically advantageous perspective. He cites the work of Andrews and Thomson (2009) as the main source. Lehrer refers to this evolutionary concept as "analytic-rumination", meaning those with depression-like symptoms may have historically been at an advantage due to thorough critical-thinking skills.

Further examination of Andrews and Thomson (2009) shows how this hypothesis has scientific bases. Since humans have limited cognitive processing abilities available at any given time, and individuals with depression often devote their entire cognitive processes to one situation, it can result in both good and bad outcomes. Those with depression seem to lack the cognitive abilities to think long-term about situations, but in zero-contingency situations where there is no predictable long-term pattern as an action does not change the probability of an outcome, depressed individuals actually outperform nondepressed individuals. In a study by Msetfi, Murphy, Simpson & Kornbrot (2005), participants pushed a button that was connected to a light bulb. There were two conditions: in one, the bulb lights up 25% of the time when a participant pushed it and 25% of the time that it was not pushed (25-25 condition), while in there was another 75-75 condition. In both of these situations, the participants actually had no control

of whether or not the bulb lit up, but the nondepressed participants reported higher perceived control in both conditions than the depressed patients.

Historically, Andrews and Thomson (2009) argue, this would have been advantageous as individuals with depressive symptoms would have been able to focus on the problem at hand to increase the likelihood of survival, knowing which actions were futile and which were worthwhile. Nesse (2000) expands how this would have been an evolutionary advantage. As Nesse explains, historically striving for a goal would have involved more risk and therefore a greater chance for failure, whereas playing it safe and making smart decisions might have increased chances of survival.

Further studies have found other advantages held by those who suffer from depression. Gawronski and Privette (1997) ran a study with 53 women, half with clinical depression and half with no clinical history. They found a significant positive correlation between level of depression and amount of empathy towards others, suggesting that those with depression may be more empathetic than those without.

Overall, just as OCD held evolutionary advantages, and those advantages subsequently were possible to be utilized even in modern society, so too does depression. Evolutionarily, depression seems to have been reinforced with the narrow-minded critical thinking leading to lower-risk behaviors, thus leading to survival. Depression in modern society seems to maintain the perceived advantage of critical thinking skills, as well as being positively correlated with levels of empathy.

Mania

While OCD and depression both have evolutionary bases as well as modern advantages, should one choose to view them in that light, it could be argued that they are less controversial mental illnesses. What about the more "serious" mental illnesses that have a higher impact on the functionality of everyday life, such as mania, schizophrenia, or dissociative identity disorder? Is it possible to argue that these more extreme disorders also are in one way or another advantageous?

What is it?

Mania is symptom that generally alternates with depression in what was once called bipolar disorder, but is now called manic-depression. There are two broad levels of mania: hypomania and hypermania, with hypomania being the less extreme. According to Walker, Seligman, and Rosenhan (2001), mania is characterized by elevated mood, increased speed of thought, actions and decreased need for rest and sleep. Individuals experiencing mania often appear to be hyper-motivated, though it is not uncommon for an individual with mania to jump from one project to the next without reaching a conclusion. Individuals with mania are often highly impulsive and frenetic, thinking not of the consequences of their actions.

The bad.

Kay Redfield Jamison (1995) illustrates some of the negatives that accompany manic episodes in great detail. Her manic episodes often resulted in extreme disorganization, both at home and at work. Her experiences with mania are not uncommon. In fact, Kogut and

Levenson (2014) acknowledge that not only is mania characterized by diorganization, it is often accompanied by grandiosity.

Grandiosity is a driving factor behind why manic individuals believe they can accomplish so much at one time (Walker, Seligman, & Rosenhan, 2001). It is not uncommon for manic individuals, including Kay Redfield Jamison (1995), to set unrealistic goals and expectations for themselves. Oftentimes, this leads to disappointment when the manic symptoms go away and may contribute to the depressive symptoms that follow.

Further symptoms of mania include decreased and dysfunctional sleep patterns, which can be highly disruptive for day-to-day life. This can further impair decision making, a trait that is already negatively impacted for individuals suffering from mania. Furthermore, extreme impulsivity can lead to practical problems as well, including irresponsible loss of money, rudeness towards friends and family, and illogical prioritization.

The good?

The evolutionary origin of bipolor disorder, and more specifically mania, is similar to the of OCD, argues Sherman (2001). Just as with OCD, the harsh seasonal conditions of the northern climate seems to have had an impact on the survival of manic-prone personalities. Sherman argues that as summers were short and winters were long, an adaptive and successful individual would need to be focused and accomplish a lot in a short time.

According to a widespread study by Tremblay and Grosskopf (2003), modern manics are found primarily to work in creative and fast-paced work areas. They found that those in a manic state have a higher creative imagination and are capable of multitasking more so than the average

individual. Though mania can be too intense, and thus inhibit quality of production, when at a hypomanic level rather than a hypermanic level, mania can be productive. This idea is supported by the data of Kyaga, Landen, Boman, Hultman, Langstrom, and Lichtenstein (2013), who examined over one million individuals across a time-span of forty years. Consistent with previous findings, individuals with bipolar disorder, compared with those suffering from other disorders as well as individuals with no psychiatric history, were more often put in creative managerial roles, further suggesting creativity and productivity can be a strength of mania if utilized correctly.

Dissociative Identity Disorder

The difference between dissociative identity disorder (DID) and the mental disorders so far discussed is a central debate surrounding DID: there is not a clear consensus that DID actually exists (Boysen & VanBergen, 2013). This makes it more difficult to analyze than OCD, depression, and even bipolar disorder, due to the fluctuating historical development of the symptoms as a disease. For the purpose of this paper, DID is treated as a legitimate psychological disorder.

What is it?

According to the DSM 5 (American Psychiatric Association, 2013), DID is when there are two or more separate personalities present at differing times from the same person. Seligman, Walker, and Rosenhan (2001) state that oftentimes these personalities are unaware of each other, not knowing details about one another or even that they exist.

There are studies that show a strong correlation between early childhood trauma and later onset of DID, though no causal link has been found. It is difficult to treat due to the obliviousness of the individual and their multiple personalities, as well as an inability to recognize the original personality that was present prior to the development of the additional personalities.

The bad.

There are many negatives that DID can present, not only for the individual suffering but as well as those around them. It is often difficult for the family and friends around individuals to deal with the mood swings of DID, as they can be brought on in a matter of minutes (Barlow, 2007).

Furthermore, the social lives of those with DID are often extremely limited, and in some cases are entirely non-existent (Barlow, 2007). As reported by Arbour (1999), this social impairment is caused by two factors: first, individuals with DID often do not possess a normative level of social skills. Second, especially in youth and adolescence, DID is the subject of heavy stigma, social abuse, and bullying.

Furthermore, treatment of DID is especially poor when compared to the treatment of other mental health disorders. Arbour (1999) acknowledges that DID is one of the leading mental illnesses whose treatment responders report little to no effectiveness of the treatment process.

The good?

In the 2010 film *Shutter Island*, the main character whose original personality/name is revealed to be Andrew Laeddis, experiences a severe dissociative episode in which he is a crime detective, seeking to discover how his other identity broke out of prison. In the end, the audience learns that the psychologists at the prison allowed this episode to continue in hopes that it would allow Andrew the opportunity to consolidate and cope with the trauma he experienced in World War II.

Dissociative identity disorder seems to be a coping mechanism for individuals who suffered early trauma, similar to Freud's defense mechanisms. According to research, personality disorders are often found in populations of individuals whom have suffered previous trauma (Watson, 1997).

Much research has been conducted with individuals who suffer from DID (Gipple, Lee, & Puig, 2006; Yu, 2011). The overwhelming majority of patients with DID report to have suffered a significant traumatic event at some point in their lives. Though this is not causal, it has lead psychologists and researchers to hypothesize that DID is a specific coping style for certain individuals. According to Yu (2011), it is the more creative minds that seem to develop DID as such a coping mechanism.

While there are clearly downfalls to DID, it is also clear that trauma-related disorders are often very difficult to treat (Swart & Apsche, 2014). Therefore, while DID incites difficulties for individuals as well as their support group, it appears to have begun as a form of self-therapy to cope with other issues that individuals have experienced. While it would take further research to

confirm this, given the pattern developing of mental disorders with evolutionary purposes, it seems reasonable to believe DID may be categorically similar.

Schizophrenia

Another disorder that is the subject of some public controversy is schizophrenia. Walker, Seligman, and Rosenhan (2001) acknowledge that the origins and causes of schizophrenia are not clearly established, but there are theories and research that suggests reasons for how and why the disorder exists.

What is it?

According to Walker, Seligman, and Rosenhan (2001), schizophrenia is characterized by delusions and hallucinations which the suffering individual often believes to be real. This individual often cannot differ between what is real and what is a figment of their imagination, leading to erratic behaviors.

Furthermore, due to this delusions and hallucinations, individuals often hear voices that tell them instructions. This leads to outward disorganized thought and speech, as well as what clinicians call paranoid schizophrenia. It is not uncommon for the voices in a case of schizophrenia to convince the individual that the world is out to get them.

The bad.

Walsh (2008) acknowledges how the voices inside a schizophrenic's mind are often the center of their issues. These voices can make them distrustful of everyone, tear down their own self-worth and self-esteem, as well as convince them to take preemptive action of those surrounding them. Furthermore, Walsh (2008) reasons how schizophrenics are less productive

than the typical individual without schizophrenia, due to their functional impairment resulting from the voices that they hear and beliefs that they hold.

Paranoid schizophrenics often suffer from delusions of reference, where they believe that every saying or action is directed towards them. This can be an issue not only for the individual, but also for those around them who sometimes have to filter what the say or do (Walker, Seligman, & Rosenhan, 2001).

The good?

Just as with the other disorders examined, schizophrenia seems to hold evolutionary ties. Huxley, Mayer, Osmand, and Hoffer (1964) wrote a controversial and well-known paper on the origin of schizophrenia. While they acknowledged there was not a clear-cut genetic tie, they also acknowledge that despite schizophrenia resulting in lower individual rates of fertility, schizophrenia remains a fairly common disease. Therefore, based on Darwin's (1860) theory of evolution, there should be an advantageous reason that schizophrenia persists.

Recent research suggests creativity, a prominent positive symptom of schizophrenia, may be a reason that schizophrenia continues. Many recent studies exhibit significant findings suggesting that schizophrenics have higher levels of creativity, and in fact higher brain activity in certain regions of creativity, than does the average person with no psychiatric history (i.e. Kaufman & Paul, 2014; Son et al., 2015).

Creativity is something that often cannot be taught, though it seems to be a point of emphasis from an early age of development (Santrock, 2014). While schizophrenia seems to be hyperactive creativity, the hypothesis by Huxley that schizophrenia persists for a reason could be

due to the creativity that it accompanies. John Forbes Nash, Jr. received a Nobel Prize for his scientific work, and he dealt with schizophrenia for many years. While it is not clear whether his success was due to or in spite of the disorder, the creativity could logically be tied to his work (Grazer & Howard, 2001).

Summary and Conclusion

Mental disorders have long been the subject of criticism and scrutiny, both within the psychological field as well as by other professionals. The existence or criteria of certain disorders has been examined in a multitude of ways. Unfortunately, modern western society often associates mental illnesses with horrific tragedies, creating a negative stigma on mental disorders and the mental health field in general.

While there are indisputable negative symptoms of mental disorders, there is evolutionary evidence that they first developed as adaptive mechanisms. Specifically, research on OCD, depression, and manic depression all indicates that the symptoms of these disorders were once advantageous in human evolution and survival. Further research suggests that though modern society ignores positives that can be manifested from these disorders, it is possible to see how there are characteristics within these disorders that could still be utilized in a positive manner. Additional research and critical thinking explores two controversial mental disorders, dissociative identity disorder and schizophrenia, in an attempt to illustrate the plausibility of even the most extreme disorders fitting into this advantageous evolutionary system.

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