Cognitive Benefits in Manic Depressive Illness

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Abstract. This paper contemplates the possible existence of positive characteristics in Manic Depressive Illness (Bipolar Disorder / MD). Being one of the most acute mental diseases of our times, MD is associated with numerous deficits that span the everyday lives of people who suffer from the illness, including but not limited to memory, attention and learning. Surprisingly at the time of this paper there has been nearly no research published in respect of examining the cognitive traits of the illness, which could be viewed as positive or beneficial in any way. Considering the important gap in the literature, this paper inspects and helps to understand the role of five of the main positive factors: realism, empathy, spirituality, resilience and creativity. It is concluded that these qualities can constitute a significant beneficence in the outcome of Manic Depressive Illness and in the long term can contribute towards the strength of one's character. It is argued here that, in this particular sense, Bipolar Disorder can be a valid part of human personal growth.

1 INTRODUCTION

According to the World Health Organization [1], Manic Depressive Illness (MD) or, more frequently called Bipolar Disorder (BD) in American diagnostic, is the sixth leading cause of disability in the world. It is generally viewed as harmful, and associated with notable stigma [2]. This fact indisputably places suffering individuals in the position, where they have to handle not only their own illness, but also harmful attitudes towards them [3].

There is mounting literature in the fields of psychiatry and clinical psychology reviewing cognitive functioning in Manic Depressive Illness. A vast majority of reports examine deficits that span numerous areas of neurocognitive functioning, including attention, verbal memory and learning, as well as so called executive functioning, referring to a wide range of processes including motivation, planning and inhibition [4]. Surprisingly, at the time of this paper, there have been nearly no clinical researches conducted that have attempted to examine the existence of cognitive characteristics that are generally viewed as valuable or beneficial in any way.

There have, however, been numerous efforts to present mental illness in a way that overcomes clinical reduction.

Perhaps the best known attempt to explain mental illness in terms of phenomenological experience comes from the works of Laing [5, 6]. His extensive research on schizophrenia develops a comprehensive picture of human efforts to remain mentally stable in a world perceived as insane. The process of developing psychosis has been re-defined by Laing as a distorted course of one's mind trying to make sense of the world and as such has initiated a broadly disputable stream known as antipsychiatry.

Laing openly criticized the clinical approach to mental illness and psychiatric treatment. His theories placed significant emphasis on the responsibility of the suffering individual's family members, making them active agents of one's mental distortions. Mainly because of that reason, Laing's works have been widely criticized and never formally incorporated into the psychiatric mainstream. However, Laing's phenomenological way of approaching mental illness has stimulated later debates on the nature of psychiatric disorders, including the enactive philosophy approach as well as the embodied mind theory. I revisit these ideas in part 4 of this paper.

The aim of this essay is to examine and to understand the role of positive cognitive features on the outcomes of Manic Depressive Illness. If indeed existing, these positive traits of MD would be of major importance to the public and psychiatric community, largely because of its relation to social stigma and quality of life in suffering individuals.

The point made above should not be mistaken for the negation of impairments caused by the illness, neither in cognitive nor in other areas of individual functioning. Being one of the most acute mental disorders of our time, MD is undoubtedly associated with a number of poor outcomes and, in many cases, leads to long term disability, affecting several areas of people's lives.

In the next part of this paper I will present the general concept of Bipolar Disorder, focusing on cognitive alterations of each phase of the illness. Part 3 will examine the available works regarding reports of positive cognitive traits of manic depression and ask the related questions about their 'beneficence'. In part 4 of this paper, I shall try to analyse those benefits in a wider framework of philosophy and psychology.

2 COGNITIVE CHARACTERISTICS OF MANIC DEPRESSIVE ILLNESS

Initially described thousands of years ago and recognized in widely different cultures, Manic Depressive Illness affects a great number of people and magnifies human experience to larger than life proportions [7]. An individual diagnosed with Bipolar Disorder may experience mood swings from episodes of an overactive, excited state of mind known as mania to deep depression. Between these severe highs and lows can be a whole range of mixed emotional states as well as times of relative stability.

Experiencing mood swings is a common human experience. People's emotional reactions to everyday events differ immensely, placing every individual on the wide spectrum of moods. There is nothing extraordinary about human emotions: they make us who we are, unique and unrepeatable beings. Emotions coexist with qualities of a cognitive character as a

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reason and outcome of thoughts, decisions, acts and memories. Alongside human variable feelings, thoughts either follow or remain prior to emotional experiences. There are a number of pieces of clinical evidence supporting either of the hypotheses: are thoughts prior to emotions or otherwise. Nevertheless this question of importance, although extremely interesting, will not play the major role in the debate presented in this essay. What constitutes the key interest here is rather the *quality* and meaning of cognitive traits in their relation to the mental illness.

Manic Depressive mood changes are taken to the extreme as well as the intensity of experienced feelings. Unlike 'normal' mood swings, those appearing in the illness do not seem to be triggered by identifiable events [8]. The clinical manifestations of MD are exceptionally diverse. Moods, emotions and behaviours flow in one individual from one extreme to another, from one episode to another and from one day to another. This emotional rollercoaster seems to cause extensive pain on several dimensions, described by individuals as of a clearly physical character, as well as existential agony. The statistics are thrilling: one in five patients suffering from bipolar disorder commits suicide at some point of their lives [7], the vast majority during an episode of depression.

A number of comprehensive reviews and meta-analyses of cognitive functioning in bipolar disorder have been published within recent decades [4], with the largest number of studies concentrating on types and extension of deficits. The outcome of clinical research shows that the most significant changes to cognitive functions appear during main episodes of MD: depression, mania and hypomania with relatively insignificant changes during periods of emotional stability [4, 7]. This in turn can be read as clear evidence that human moods and emotions affect cognitive functioning in a way much deeper than some would like. To fully understand this statement it might be useful to consider an alternative approach to human cognition. Part 4 of this paper discusses this idea in a broader context.

2.1 COGNITIVE FUNCTIONING IN THE EPISODE OF DEPRESSION

People dealing with depression experience long-term, deep and thorough sadness. This phase of the illness is often described as the most difficult to cope with by suffering individuals. They talk about diminished will to live and lost hope to see things another way.

There are no studies comparing the chronicity of cognitive dysfunctions during different stages of MD [9]. However, those focusing on the outcomes of episodes of depression give evidence of a reported lack of concentration, loss of interest in everyday life and sleep dysregulation. According to some findings, the later factor can even constitute a core mechanism of the entire illness [10]. Verbal learning and memory are other domains of cognitive functioning, frequently found to be impaired [11], as well as a loss of motivation to accomplish usual activities. Depressed individuals frequently complain that their process of thinking has changed, that they are confused, ruminative and feel inadequate [7]. Custance (in [7]:41) provides the following illustration of reported cognitive difficulties:

"I seem to be in perpetual fog and darkness. I cannot get my mind to work; instead of associations "clicking into place" everything is inextricable jumble; instead of seeming to grasp a whole, it seems to remain tied to the actual consciousness of the moment. The whole world of my thought is hopelessly divided into incomprehensible watertight compartments. I could not feel more ignorant, undecided, or inefficient. It is appallingly difficult to concentrate, and writing is pain and grief to me."

Additional difficulties may be observed during acute stage of depression, including irrational fears, delusions and other false beliefs. At the very heart of all described symptoms seems to lie one's perception of herself as a worthless, failure, not important being, often filled with overwhelming guilt.

2.2 COGNITIVE FUNCTIONING IN THE EPISODE OF MANIA AND HYPOMANIA

According to diagnostic manuals, manic episodes are characterized by inflated self-esteem or grandiosity, which may often be delusional. Individuals undergoing manic stages usually think fast, perceive themselves as happy, filled with vital energy, with increased need for talk and, on the other hand, decreased need for sleep (with some people reporting feeling fine after only 2 to 3 hours of sleep). These experiences may not cause any suspicions or worries – very often they are identified as pleasant and productive. However, a lack of moods regulation, which lies in the very base of the illness, will push those 'nice' experiences to the extreme speed and intensity, making the suffering individual lose rational control over her own emotions and actions. Davison and Neale [12] illustrate this process by presenting the following case:

"Mr. M., a thirty-two year old postal worker, had been married for eight years. He and his wife lived comfortably and happily in a middle-class neighborhood with their two children. In retrospect there appeared to be no warning for what was to happen. On February the twelfth Mr. M. let his wife know that he was bursting with energy and ideas, that his job as a mail carrier was unfulfilling and that he was just wasting his talent. That night he slept little, spending most of the time at a desk, writing furiously. The next morning he left for work at the usual time but returned home at eleven a.m., his car filled to overflowing with aquaria and other equipment for tropical fish. He had quit his job and then withdrawn all the money from the family's savings account. The money had been spent on tropical fish equipment. Mr. M. reported that the previous night he had worked out a way to modify existing equipment so that fish "…won't die anymore. We'll be millionaires". After unloading the paraphernalia, Mr. M. set off to canvass the neighborhood for possible buyers, going door to door and talking to anyone who would listen."

Cognitive deficits usually deteriorate alongside a three-stage course of accelerating intensity [8]. In the first, hypomanic stage, people typically maintain their ability to function in their daily lives. Nevertheless, as they evolve throughout the second and third stages of mania and severe mania, their thinking becomes more disorganized and their actions chaotic, irrational, even psychotic-like, following delusions of omnipotence and possessing skills and talents forbidden to others. Power, grandeur and persecution are common themes in one's manic beliefs. In acute mania, the reports of hallucinations (false perceptions that lack a sensory basis) may also be found.

There is a growing evidence of cognitive difficulties experienced by individuals suffering from Manic Depressive Illness. Thorough analysis of those reports serves to pose questions about the potential existence of any beneficial traits in

cognitive functioning. The next part of the paper will face this challenge.

3 POSITIVE ATTRIBUTES OF BIPOLAR DISORDER

There is rising interest in clinical research aiming to understand the role of positive psychological traits on the outcomes of medical illnesses. While it seems to be widely accepted that the influence of beneficial psychological attributes on health is important, this subject is less studied in relation to mental heath [13].

At the first glance it may sound surprising to place 'bipolar' and 'positive' in the same sentence. However, a thorough study and analyses conducted by some psychiatrists [13, 14, 15] discovered that having the illness might enhance particular cognitive characteristics that are viewed as beneficial. The authors of one of the studies reviewed 81 examples that mentioned positive psychological qualities in individuals diagnosed with Manic Depressive Illness and found a strong association with the following five qualities: realism, empathy, spirituality, resilience and creativity [13]. Below is presented a closer focus on the discovered aspects, with a wider discussion following in part three of the paper.

Realism: Studies in clinical psychology repeatedly evidence this extraordinary phenomenon: depressed people perceive their lives and events in a more realistic (understood as closer to truth) way than non-depressed individuals. These findings raise the following philosophical questions: why does being sad help human perception to flow closer to Earth than being in non-depressed state of mind does? Why are people who suffer from desperately low self-esteem able to assess objective circumstances more accurately than 'healthy' individuals? For whom may this particular psychological trait be beneficial? Do people in depression *want* to see things around realistically – or – perhaps would they chose to see them in less realistic way, but not having the illness?

Empathy: Like realistic perception, empathy also appears to be increased in individuals undergoing phases of depression. The reason for this phenomenon has not been clearly explained in clinical psychology, nonetheless it has been evident that people suffering from depression show increased empathy, sympathy, are more compassionate and understanding for other suffering beings including people and animals than those who are 'healthy'. Again, similar questions may be posed: why does a high level of empathy co-exist with depression? Who is beneficent of depressive empathy? From which point of view can compassion be seen as 'positive'? To what extent are depressed individuals content to have the mentioned traits?

Spirituality: This psychological characteristic is sometimes associated with deterioration of mental disease in the same manner as it is with predictions of its healthy outcome, making it problematic to define whether it constitutes an asset or a liability for long-term treatments and prognosis in mental health. However, a couple of studies reviewed by the authors found that spirituality and strength of one's beliefs was a better predictor of good outcomes in Bipolar Disorder than any other psychiatric comorbidity associated in the General Health Questionnaire (GHQ). Also, interestingly, those individuals who search for spiritual healing seem to have significantly better outcomes (course of illness, mood swings or episodes) than those who do not seek such type of relief. The following questions are of interest: what cognitive qualities does spirituality involve? What makes 'believers' go through the course of illness in an easier and less harmful way than people who do not have faith?

Resilience: As a subject of clinical interest, resilience has been studied mainly as a personality trait, that appears in many cases after experiencing major trauma, e.g. war or natural disaster. High levels of resilience help individuals to resist from developing posttraumatic stress disorder (PTSD). In a presented study, a person diagnosed with bipolar disorder, who had earlier a history of PTSD, was more resilient to new trauma than those BD individuals, who did not have such experiences. The authors do not make it quite clear, what role bipolar disorder could play in the outcome of this study; nonetheless it is assumed that "if mood episodes in bipolar disorder can be conceptualized as discrete traumata then each recovery from a mood episode can be seen as an opportunity for post-traumatic growth." [13:187] So can resilience, traditionally and non-clinically understood as an attribute of one's character, be developed through dealing with bipolar experiences?

Creativity: This psychological trait, unlike the other four mentioned earlier, has been studied numerous times in relation to Manic Depressive Illness. Commonly known is the fact that many of the greatest artists suffered from BD and admitted the influence their illness had on their work. However recent research have shown that although milder states of MD were indeed igniting creativity, the cases of full blown bipolar disorder were rather uncommon among productive artists [13]. The available studies indicate that the features most related to high levels of creativity were thought speed and openness to new experiences and found mostly among hypomanic individuals. This gives rise to the following dilemma: to what extent can elevated mood facilitate creativity? Is it possible for a hypomanic creative person to set up borders of 'secure' creativeness, before she reaches a 'tipping point' of delusional state of mind, where she is no longer grounded in reality? If not, how beneficial will her work be for herself? The third part of this essay aims to answer some of these questions in a wider context.

4 DISCUSSION

So can emotional pain be a catalyst for personal growth? The study presented above may be introducing us to such a hope. Certainly, encouraging an appreciation of the positive aspects of Manic Depressive Illness could help battle social stigma. However, would it make any other positive difference to a suffering individual and on what basis?

Let us start the discussion by contemplating the following doubt, which might have emerged whilst analysing the benefits: Is it justified to give the traits, described, the status of cognitive qualities? It is probably less arguable to consider realism and creativity as functions of human cognition, rather than it is to do so with empathy, spirituality or resilience. One may suggest that the latter traits constitute more emotional ones, or-at least-not entirely befitting the traditional model of computational cognition.

These controversies might become less critical once we adopt the enactive approach to the mind. According to the above, as defined by Thompson and Varela [16, 17] cognition is not limited to the computational activity of the brain, but is a subject of the embodied experience. The human mind is not reducible to

structures inside the head. Instead, cognition constitutes a form of embodied action, enacted by the being's autonomous agency. This includes emotions, which are an integral part of this process of creating meaning ('sense-making') and as such count as essential cognitive tools.

It is possible to see, that within the enactive framework, all of the positive traits of Bipolar Disorder mentioned are very much a subject of cognition, as described by Thompson [16] and are defined by its affective nature. It also clear, that the effect that embodied cognition has on the experience of Manic Depressive Illness is not to be underestimated and should be a subject of further investigations.

Discoveries regarding depressed people's superior realistic perception in comparison with that of 'healthy' individuals seem to be promising. Psychological insight into positive cognitive bias shows that people without a mental illness tend to overestimate their own abilities and their control over surroundings; they also tend to interpret events in an over optimistic manner. When would a 'depressive' realistic perception be beneficial? Firstly, this particular discovery might change the way the close environment sees depressive individuals. Often perceived as 'exaggerating' their worries, people suffering from this illness may be actually closer to truth than others. Does it benefit them in any way? Not at the first glance, in terms of their immediate emotional improvement. However, as they see things more realistically, they might be able to make a more accurate decision and take a more precise course of action in the case of crisis or other general difficulties. Winston Churchill, British Prime Minister of the times of the WWII, commonly known as suffering from bipolar disorder, took his most important decisions whilst undergoing depression. From both a historical and political point of view, it would seem unreasonable to call his decisions unsuccessful. In the long term, so called depressive realism could also be beneficial by helping to build positive self esteem, thanks to accomplishing a set of accurate and successful tasks.

Empathy, being a direct result of depressive deeper awareness and insights, makes people more compassionate and understanding to the suffering of other beings. Perhaps subjectively experienced pain creates deeper sensitivity in perceiving the world? Perhaps there is subtler, yet undiscovered biological relation between depression and empathy? The ability to show compassion is generally seen as 'good' attribute of one's character. Presumably, if one *acts* upon such motivation, her acts can potentially contribute to create more *good* in the world, e.g. by engaging in charity or another kind of aid, and as such may classify as virtue, in Hume's understanding of the word. In this sense, a depressive state can be beneficial to a sufferer by providing a valid cause for strong character.

Spirituality, as a psychological attribute, involves a set of beliefs that one puts upon her existence, goals, past and present experiences including illness. Spiritual or religious belief is of the highest philosophical dispute regarding its rationality; however for an actual believer this dispute does not seem to be extremely important. Spirituality organizes one's life by providing value and meaning to everyday events, both of external and internal kind to one's mind. It offers *faith*, often understood as an organized set of beliefs whilst a better future, better life and better health are being awaited. Perhaps this ability to concentrate one's thoughts on a positive outcome of the illness is the key factor in spiritual beneficence. Additionally, for many people, being spiritual is related to participating in a wider community, being able to share their own religious beliefs without being challenged or criticized. The roots of this experience are deeply grounded in phenomenology and undoubtedly can benefit the individual by offering necessary acceptance and understanding.

Resilience seems to be the most enigmatic out of the aspects presented in the study. It is assumed there that undergoing a specific kind of trauma, in the meaning of bipolar episodes, creates better resilience in suffering people, thus so they are more likely to win their next life battle. However, it is not clearly stated, if this 'next life battle' refers to another episode of bipolar disorder, to a difficulty that a person might encounter outside of her illness, or to any possible problem in general. There is a 'common truth' that experiencing pain and going through difficult times can make people stronger. Perhaps it is this particular type of resilience that the authors have in mind. If so, this idea reflected in existential philosophy, could add a positive meaning to every human illness, including, of course, Bipolar Disorder.

Enhanced creativity has been studied thoroughly in relation to Manic Depressive Illness, especially to manic spectrum episodes. It very much seems to be an outcome of the individual being able to make quick mental associations, thinking fast and 'outside of box', and her mood being lifted above average, motivating her actions with an extraordinary strength. However, in many cases, where mood control fails, those emotional 'highs' have an adverse effect on achievement, leading to scattered thinking, grandiose delusions and destructive behaviours of mania. Can we then say, with clear certainty, that enhanced by BD creativity is indeed a 'positive' attribute? Perhaps it can be, if we distinguish between mild symptoms that lead to productivity and severe symptoms that lead to dysfunction. Nonetheless, as at the core mechanism of Manic Depressive Illness lies one's *inability* to control moods and related behaviour, this leaves the question of its cognitive beneficence open. Magnificent examples of art, created in manic spectrum episodes, certainly benefit the recipients and the world's cultural heritage. Perhaps, by offering their authors positive feelings of contributing to the world's good, they also provide a vital psychological profit of personal importance.

5 CONCLUSIONS

The purpose of this paper was to analyse potential existence and meaning of cognitive benefits in Manic Depressive Illness. Although a large number of cognitive deficits has been reported in relation to Bipolar Disorder, five main positive factors could be found among others: realism, empathy, spirituality, resilience and creativity. Whilst analysing those attributes in a wider psychological and philosophical context it has been asserted, that their beneficence can constitute rather distant than immediate effect and contribute rather towards strengths of the character than short-term relief from experienced pain. In this sense, undergoing Manic Depressive Illness, can be a valid part of human personal growth.

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