Should Borderline Personality Disorder Be Placed on the Bipolar Spectrum?

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ABSTRACT

Bipolar disorder (BD) is a mood disorder characterized by changes in activity levels, mood, and energy. These categories can range from elation during manic episodes to depression during depressive episodes. BD affects 2-3% of the population. Borderline personality disorder (BPD) is the diagnostic label assigned to individuals who struggle with unstable personal relationships, hypersensitivity to rejection, or an unstable self-image. 1.6% of the general population has this disorder and 20 percent of those in the psychiatric population have BD. Given that BD and BPD share features, such as rapid mood swings, impulsive actions, and suicidal behavior it is sometimes difficult for practitioners to readily and accurately differentiate between these two disorders. These issues with diagnosis have led to the idea BPD should belong on the spectrum of bipolar disorders. The current paper compares the disorders, including their clinical presentation and symptoms, the effect of genetic and environmental factors on the development of these disorders, and treatments for each disorder. The aforementioned topics represent factors underlying the resolution to the question of whether BPD belongs on the bipolar spectrum. Answering this question would allow researchers and clinicians to better understand the relationship between these disorders and the best treatments for BPD and BD.

Introduction

Over the last couple of decades, many researchers and clinicians have begun asking if borderline personality disorder (BPD) shares enough characteristics with bipolar disorder (BD) to be classified as part of a spectrum ranging in mood instability, i.e., the bipolar spectrum. The Diagnostic and Statistical Manual of Mental Health Disorders (DSM-5) provides classification for mental health conditions. However, the DSM is constantly changing due to the continual debate over the criteria for mood and personality disorder diagnosis. Although the DSM is the standard for diagnosing patients it is flawed due to the similarity in descriptions for BPD and BD, leading many to believe a reclassification of these disorders is necessary (Bridley & Daffin, 2020). Borderline personality disorder is characterized by severe mood swings, impulsive behavior, and difficulty maintaining relationships (American Psychiatric Association, 2013). Key features seen in patients with BPD are viewing the world as either good or bad, projecting feelings seen as unacceptable onto others, and using maladaptive defense mechanisms (Lingardi & McWilliams, 2017). Comparatively, BD is a mood disorder distinguished by cycles of mania and depression, resulting in difficulties maintaining a social and work life (American Psychiatric Association, 2013). Mood swings that inhibit daily life function are characteristic of patients with BD (Grande, Berk, Birmaher, & Vieta, 2016).

The term “bipolar disorder” is used broadly to include bipolar I disorder, bipolar II disorder, and cyclothymic disorder. These designations differ in terms of severity and duration of manic and depressive episodes. Bipolar I disorder is identified by observable manic episodes which may present as: overconfidence, feelings of grandeur, talkativeness, impulsivity, irritability, decreased need for sleep, and uplifted moods. Bipolar II disorder is defined by the presence of cycles of depression and hypomania, a mild version of mania that
lasts a couple of days (Carvalho, Firth, & Vieta, 2020). Cyclothymic disorder is characterized by chronic cycles of moderate depression and hypomania (Van Meter, Youngstrom, & Findling, 2012).

Regardless of the specific type of BD a patient presents, research indicates that BD traits begin at a median age of 25 (Anderson, Haddad, & Scott, 2012). An estimated 4.4% of adults in the U.S. will experience BD at some point in their lives, with their symptoms ranging from moderate to serious impairment. Approximately 83% of BD patients experience serious impairment (Kessler, Chiu, Demler, & Walters, 2005). Although BD is less common in adolescents, it is still present in an estimated 2.9% of adolescents. Of these, approximately 2.6% experience serious impairment (Merikangas et al., 2010).

According to the DSM-5, there are 9 diagnostic criteria for BPD and at least 5 of the criteria must be met for a patient to be diagnosed. The 9 criteria are: (1) desperate measures taken to avoid abandonment, (2) unstable relationships with others alternating between devaluation and idealization, (3) unstable sense of self, (4) self damaging impulsivity (e.g., binge eating, excessive drinking, excessive spending etc.), (5) suicidality, (6) rapid and intense mood swings, (7) enduring feelings of emptiness (8) intense and uncontrollable anger (9) paranoia (American Psychiatric Association, 2013). In the U.S., 1.6% of the general population is affected by BPD (Chapman, Jamil, & Fleisher, 2022). Additionally, individuals with BPD represent a significant proportion of all patients within the mental healthcare system, with 10% of psychiatric outpatients being affected (Swartz, Blazer, George, & Winfield, 1990), and 20% of psychiatric inpatients (Widiger & Weissmen, 1991). Though uncommon to diagnose children, the prevalence of BPD was reported to be 11% at age 9-19 and 7.8% at age 11-21 years (Bondurant, Greenfield, & Tse, 2004).

Understanding the similarities and differences between BPD and BD can help us further understand the best way to conceptualize these disorders, which will help clinicians to more accurately diagnose and treat patients. Because BPD and BD each have a vast range of features it can often be difficult to draw a comparison between the two. One key feature of both BPD and BD is uncontrollable, rapid mood swings, however, patterns observed in these mood changes differ. Patients with BPD usually experience fleeting mood shifts, caused by interpersonal stressors, whereas BD patients experience more sustained mood shifts (Paris & Black, 2015). There are some distinctive features that differentiate BPD and BD. One of the foremost features that separates them is the presence of intense and unstable relationships in BPD patients. These patients often struggle with a need for attachment and distance at the same time which is often driven by severe abandonment fears (Berzoff, Flanagan, & Hertz., 2011). Contrastly, a key feature of BD is cyclical episodes of mania (or hypomania) and depression, which can be accompanied by changes in moods, ideas, behaviors, and actions (Anderson, Haddad, & Scott, 2012). Mental health experts acknowledge that BPD and BD share noteworthy characteristics that make it difficult to differentiate between the disorders. Given these similarities, the idea of a spectrum including BPD and bipolar disorders has been suggested. This paper suggests that BPD does not belong on the bipolar spectrum because the body of literature highlights the many differences in these disorders, such as treatment, prognosis, and core features. The idea that BPD should be viewed as part of the bipolar spectrum was developed when the research on BPD and BD was limited. However, as further studies have been conducted, the majority of the literature supports conceptualizing BPD and BD as distinct disorders (Paris & Black, 2015; Paris, Gunderson, & Weinberg, 2007; Zimmerman & Morgan, 2013). This literature review seeks to answer the question of whether BPD belongs on the bipolar spectrum by reviewing four facets of BPD and BD: the presentation of each disorder, the role of genetics and environmental factors in development, the treatments for each disorder, and the role of misdiagnosis. Finally, this literature review will discuss the implications of the findings on future research, and practice.

**Differentiation Between BD and BPD**

The diagnostic criteria for BD and BPD both include recurrent mood changes, however this specific symptom can differ in its presentation in the context of these disorders. More specifically, mood changes in BPD last for
a shorter duration of time than in BD (Paris & Black, 2015). In contrast, according to the DSM-5, the diagnostic criteria for BD is persistent mood changes that last at least 4 days. Other symptoms that patients with BPD or BD share are impulsivity, recurrent suicidality, and anger. However, these symptoms are usually persistent in BPD patients, whereas BD patients experience these symptoms during intermittent periods of hypomania or mania (Sanchez, 2019). In particular, impulsivity is a core characteristic of both BPD and BD. In both disorders impulsivity seems to be a more stable trait rather than a symptom that fluctuates in conjunction with the patient’s mood. Using the Barratt Impulsivity Scale (i.e., a system designed to qualitatively measure impulsivity), Najt and colleagues (2007) compared impulsivity scores among BD patients to healthy control scores. The authors found that BD patients yield higher impulsivity scores than those of the designated healthy controls.

Studies exploring the potential connection between BPD and BD have compared standardized measures of these disorders in order to accurately identify and distinguish the way they are diagnosed. For example, Vohringer and colleagues (2016) used the Mood Disorder Questionnaire (MDQ) to compare patients diagnosed with BPD and BD, in order to identify characteristics that could differentiate these disorders. The results of this study suggests that recurrent elevated mood, a history of goal oriented activity, and a sporadic co-occurrence of manic features represent three clinical features exclusive to BD. The authors suggest that these features could be used to accurately differentiate between these two disorders. This study also found that the MDQ provided a correct positive diagnosis (i.e. sensitivity) 88.7% of the time and an accurate negative result (i.e. specificity) 81.4% of the time (Vohringer et al., 2016). The results of this study prove that these standardized tests can accurately identify BPD and BD majority of the time. Another similar study tested the accuracy of screening instruments for BPD (MDQ) and BD (McLean Screening Instrument; MSI). The researchers found that the sensitivity of the MDQ and MSI was 68% and 63%, respectively, and the specificity was 84% and 73%, respectively. The study further identified a history of periods of co-occurring increased energy and sleep deprivation with grandiosity, an increased speech rate, and goal focused hyperactivity as defining features of a BD diagnosis, meaning the presence of such features can be used to rule out a BPD diagnosis. Similarly, self injury, irritability, and distrust in relationships represent defining features of BPD and can be used to rule out BD (Palmer et al., 2021).

**Development of BPD and BD (Genetics)**

Most disorders are caused by genetics, environmental factors, or a combination of both. However, there is insufficient research on the role that genetics play in the development of BPD and BD. Most researchers agree that the development of these disorders can neither be reduced down to one cause (e.g., Kendler, 2006; Craddock & Sklar, 2013). In 2000 Torgersen and colleagues examined whether genetics played a role in the development of BPD, using 221 pairs of same sex twins. It was found that 35% of the monozygotic twins and 7% of the dizygotic twins both met the criteria for BPD, suggesting that genetics may play a significant role in the development of BPD. Another study on this topic found that the concurrence of BD in monozygotic twins was 40-70%, versus 5-10% in first degree relatives, which proposes that one’s genes may be a vital factor in the development of BD (Craddock & Jones, 1999). The aforementioned studies represent preliminary efforts to understand whether BPD and BD are affected by genes and whether there may be a genetic link between these disorders. However, more sophisticated studies using more advanced methods are needed to figure out which genes or how many genes are playing a role in the development of BPD and BD.

In order to assess whether there could be a genetic link between BPD and BD, studies have used the proband (i.e., the first member of the familial lineage to present with the disorder) as a basis for calculating another family member’s risk of developing BD (Loranger, 1985; Links, Steiner, & Huxley, 1988; Schulz et al., 1986; Zanarini et al., 1988; Silverman et al., 1991; Pope et al., 1983). These studies compared the prevalence of various disorders and conditions in the family members of BPD or BD patients, and found that the chance of developing BD with a family history of BPD ranged from 0.54% (Loranger et al., 1985) to 4.5% (Links, Steiner,
These figures are roughly equal to the lifetime prevalence of BD, leading to the understanding that BPD and BD are most likely not genetically linked (Kessler et al., 1994). Additionally, a genome wide analysis conducted by Witt and colleagues (2014) examined BPD patients for significant bipolar disorder gene variants in the CACNA1C, ANK3, AND ODZ4 genes. Out of these three genes, five single nucleotide polymorphisms (SNPs) were identified, however only one SNP (Rs1006737) had a significant correlation to BPD. This SNP showed a minimally significant correlation to BPD, with a p-value of 0.0498, however, once correction for multiple testing was applied, it was found that there is no significant association. This study reinforces that most likely there is no genetic link between BPD and BD (Witt et al., 2014).

**Development of BPD and BD (Environmental Factors)**

Some researchers have theorized that the development of BPD and BD pertains to environmental factors more than to etiological factors. The literature on environmental correlates of BPD focuses on patients’ experiences with their caregivers. Three main theories about the childhood of patients with BPD have been developed. One of these theories states that large amounts of early aggression leads children to separate positive and negative perceptions of themselves and their mother, thus leading to the development of BPD (Kernberg, 1975). The second theory suggests that failing at early parenting can prevent a child from being able to form a lasting representation of people in their mental structure (i.e., unstable object constancy), leading to the development of BPD later in life (Adler & Buie, 1979). The third of these theories, developed by Masterson (1972), revolves around the idea that a central factor of BPD is fear of abandonment, caused by mothers withdrawing emotionally when their child demonstrates independence. After the children grow up, feelings of independence are linked to abandonment panic.

Not many theories for the role of environmental factors in the development of BD have been created. However, there are many clinical studies, looking at the role of childhood trauma in the development of BD (Etain et al., 2010; Watson et al., 2014). One study by Etain and colleagues (2010) examined a potential link between both the presence and severity of childhood trauma and development of BD later in life. The authors used the Childhood Trauma Questionnaire (CTQ) with 260 BD patients and 94 healthy control patients, and found that the bipolar patients yielded higher childhood trauma scores, relative to the control patients, (63% versus 33%). Bipolar patients also reported more frequent and more severe forms of childhood trauma. This study suggests there is a correlation between the frequency and severity of childhood trauma and BD. Although these results seem significant, when a multiple logistic regression test was performed it was found that only emotional abuse is related to the development of BD. Though this research does not demonstrate causality, it suggests that early emotional abuse may be an environmental etiological component of BD (Etain et al., 2010).

In addition, Bücker and colleagues found that adults with BD that had a history of childhood trauma have significantly worse global assessment of functioning scores (i.e. a test that quantifies the amount a disorder disrupts a patient's life). In addition to worse GAF scores, childhood trauma was also linked to developing BD at a younger age (Bücker et al., 2013). Childhood abuse and maltreatment have long been linked to the development of BPD (Afifi et al., 2011), and recently childhood abuse has also been linked to worse functioning in BPD patients (Gunderson et al., 2006). The body of literature, comparing the role of environmental and social factors in the development of BPD and BD is currently limited. However, there is significant research, which demonstrates the effects of social factors, like (e.g. childhood trauma), on the severity of BPD and BD.
Treatments for BPD and BD

It can be difficult for clinicians to differentiate between BPD and BD, because of the many similarities between these two disorders, which can often lead to misdiagnosis. Research indicates that more than one third of patients suffering from severe mental illness are misdiagnosed (Ayano et al., 2021). A misdiagnosis of a mental illness can lead to an incorrect or harmful treatment. Additionally, a patient’s recovery period could become much longer, or their illness could get worse, and in extremely severe cases a patient could end up losing their life. A misdiagnosis of BPD and BD can have significant consequences given that they are treated in different ways.

A common treatment for BD is pharmacotherapy. Pharmacotherapy has shown to be highly effective in patients with a correct BD diagnosis and thus represents a first line treatment for BD (Goodwin & Jamison, 2007). Among BPD patients, medication does not usually alleviate the symptoms or underlying issues associated with this disorder (Kendall et al., 2010). Since no one medication has been found to effectively treat BPD, in the occasional instance when such patients are prescribed medications, they have to be given multiple medications, which change the makeup of the brain and nervous systems (i.e., psychotropic medication) (Choi-Kane et al., 2017). Since BPD patients are not usually given medications, the main form of treatment is therapy. Various types of therapies have been found to effectively treat BPD. These therapies include dialectical behavior therapy (DBT), mentalization based treatment (MBT), transference focused therapy (TFP), and general psychiatric management (Gunderson et al., 2018).

Different medications can be used to address the different parts of BD (i.e., mania and depression). Effective short-term treatments for mania have been found to be antipsychotics such as olanzapine, risperidone, and haloperidol (Cipriani et al., 2011). These antipsychotics are used to stabilize mood in bipolar mania. The effectiveness of a medication could also be dependent on the patient’s level of functioning (e.g., healthy, neurotic, borderline, or psychotic). Healthy individuals are characterized by an ability to adapt to challenging situations whereas neurotic individuals often respond to stressors with a rigid set of defenses. Individuals with a borderline level of organization are vulnerable to overwhelming emotions and often use maladaptive coping mechanisms. Psychotic individuals have experienced a break from reality (i.e., inability to differ between reality and fantasy).

Although clinicians are able to treat bipolar mania, treating bipolar depression has proven to be difficult for clinicians because not many treatments have been shown to be effective in empirical research (Geddes & Miklowitz, 2013). There is not much evidence for the effectiveness of antidepressants as a treatment for BD depression, anti-depressants are still commonly prescribed though (Yatham et al., 2013; Gijsman, Geddes, Rendell, Nolan, & Goodwin, 2004). Antidepressants function by increasing the amount of neurotransmitters in a patient’s brain. An increase in neurotransmitters leads to an increase in dopamine and serotonin, which in some cases has triggered manic episodes in patients (Nall, 2019). For the long term treatment of BD, lithium is currently the best medication. (Cade, 1949). However, there are potential problems that could be caused by long term lithium usage (such as hyperthyroidism). Because of the potential issues of this medication different long term treatments for BD are necessary (McKnight et al., 2012). Those who are not in support of a BPD-BD spectrum point out the differences in the treatments between BPD and BD to support the idea that these disorders should be kept separate.

Some researchers claim that BPD is the psychiatric diagnosis that is most stigmatized (Nehls, 1998). A stigma is a negative perception associated with a particular condition, circumstance or quality. The stigmatization of those with mental illnesses could result in lower self esteem (Wahl, 1999; Wright et al., 2000), increased isolation (Link et al., 1989), hurt and anger (Wahl, 1999), rejection, and avoiding healthcare (Sirey et al., 2001). In a clinical setting nurses commonly think of BPD patients as manipulative, annoying, dangerous, difficult, treatment resistant, attention seeking, timewasters, and nuisances. Nurses also report feeling fear and
frustration in response to self harm (Wilstrand et al., 2007). Additionally, individuals with BD have high perceived stigma (Brohan et al., 2010) which can be associated with reduced personal relationships, poor cognitive functioning, financial issues, reduced autonomy, and workplace difficulties (Thome et al., 2012; Vázquez et al., 2011). An increased likelihood of affirming stigma in order to prevent help seeking is linked with having a mood disorder (Alvidrez & Azocar, 1999). In addition to preventing patients from reaching out for help, the stigma behind these disorders can also affect the diagnosis of a patient. Clinicians have used the stigma behind BPD to avoid giving their patients this diagnosis. Between BPD and BD, the latter is seen as the more socially acceptable and preferable diagnosis (Saunders, Bilderbeck, Price, & Goodwin, 2015).

**Conclusion**

This paper takes a look at various aspects of BPD and BD to determine whether BPD belongs on the bipolar spectrum. In order to examine this question four factors of BPD and BD were examined: symptoms and presentation, the effect of genetic and environmental factors on the development, and treatments. As discussed in section one, shared features between BPD and BD include recurrent mood changes, impulsivity, recurrent suicidality, and anger which leads some to believe that BPD belongs on the BD spectrum (Sanchez, 2019). However, BPD and BD differ with respect to the duration and severity of such features (Paris & Black, 2015). Sections 2 and 3 discuss the effects of genetic and environmental factors on the development of BPD and BD. In section 2 specifically, the role of genetics in the development of BPD and BD were discussed. In addition, the genetic links between BPD and BD were examined. Section 3 reports findings, which suggest that certain experiences or environmental factors predict the development of BPD and BD, such as childhood trauma or abuse, though the extent to which the development of these disorders is hereditary versus socially/environmentally based is unknown. Many theories have been formed to explain the relationship between environmental factors and the development of BPD. In section 4 the ways misdiagnosis can affect a patient is examined in the context of BPD and BD.

Although it can be difficult for clinicians to differentiate between the presentations of BPD and BD, there is extensive literature on the features specific to each disorder, including studies of the effectiveness of standardized tests for diagnosing BPD and BD (Vöhringer et al., 2016; Palmer et al., 2021). The literature looking at the development of BPD and BD is split into two categories: genetics and environmental factors (e.g., nature versus nurture). Most researchers agree that the literature on the development of these factors needs to be expanded upon and that the development of these disorders is not well understood (Craddock & Sklar, 2013; Zanarini, 2000). The research conducted about the development of these disorders is also unable to differentiate whether the results from the study are caused by environmental or genetic factors. Researchers are focused on learning how to accurately diagnose BPD and BD in order to provide proper treatment for patients. Although treatments shown to be clinically effective have been found, these treatments usually come with their own set of drawbacks (e.g., the potential toxicity of lithium, a BD medication or the potentially harmful relationship between a therapist and a BPD patient). Because of the drawbacks that these prescriptions come with, further research and trials need to be conducted to develop more effective treatments. In addition, BPD and BD have differing treatments, therefore when patients are misdiagnosed they do not receive proper treatment.

In light of the findings reviewed in this paper, highlight the importance of thoroughly reviewing a patient's background, symptomatology, patterns of behavior, and patterns of personality to achieve a correct diagnosis. The literature discussed also demonstrates that BPD and BD are different disorders and need to be treated as such. These disorders also require distinctive treatments, which further differentiates between these disorders. Clinicians and researchers could potentially use standardized tests to diagnose patients or to isolate certain symptoms that would help differentiate between the disorders.

In order to better answer the question of whether BPD belongs on the Bipolar spectrum, further research regarding the presentation, development and treatments of these disorders would need to be looked at.
Ways to improve the studies around this topic would be to use larger, more diverse samples as most samples lack representation of minorities (Konkel, 2015). Additionally, it has been found that there is a higher prevalence of mood disorder among the African American community, making it imperative that they are well represented in mood disorder research specifically (Klatzkin, Mechlin, Bunevicius & Girdler, 2007). In relation to the study of the influence of genes on the development of BPD and BD further studies are needed in order to pinpoint the specific genes or group of genes associated with BPD and BD. Further research could also help researchers determine the strength of the influence of genes on the development of BPD and BD. Although enormous progress has been made in the research of BPD and BD, in the last 25 years, additional research is still necessary to further the understanding of these disorders. With a greater understanding of BPD and BD the lives of thousands, if not millions of people could be improved.

References


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