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Brief Clinical Report

The belief that being high is a natural part of your personality predicts an increase in manic symptoms over time in Bipolar Disorder

Abstract

Background: Several psychological models of bipolar disorder propose that certain types of appraisals can lead to increases in manic symptoms.

Aims: We tested whether the belief that being ‘high’ is a natural part of one’s personality correlates with manic symptoms four months later when controlling for manic symptoms at baseline.

Method: A prospective four-month follow-up design using self-report measures. Forty people with a diagnosis of bipolar disorder completed a measure of manic symptoms, a measure of appraisals associated with bipolar disorder, and a single-item measure, “To what extent do you feel like being ‘high’ is a natural part of your personality”, at baseline and follow up.

Results: The single-item measure showed modest stability over time and construct validity in its correlation with a standardised measure of appraisals in bipolar disorder. As predicted, the single-item measure correlated with manic symptoms at follow up when controlling for manic symptoms at baseline.

Conclusions: The belief that being ‘high’ is a natural part of one’s personality is a potential predictor of manic symptoms. Further research needs to study the potential mediating mechanisms such as activating behaviours, and control for indicators of the bipolar endophenotype.

Keywords: Bipolar disorder, mania, dysfunctional attitudes, appraisals, CBT.

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Introduction

Bipolar disorder is a mental health problem characterised by episodes of hypomania (Bipolar II disorder) or mania (Bipolar I disorder), with symptoms such as increased activity and energy, pressure of speech and reduced need for sleep, and episodes of depression with symptoms such as sadness, reduced energy and feelings of guilt or worthlessness (WHO, 2022).

There is considerable negative impact of bipolar disorder, such as poor employment (Marwaha, Durrani, & Singh, 2013), poor quality of life (Michalak, Yatham, & Lam, 2005), high suicide rates (Dome, Rihmer, & Gonda, 2019) and reduced life expectancy (Kessing, Vradi, & Andersen, 2015). However a small body of research has shown that some people with the diagnosis find positives in it, in particular the manic side of bipolar disorder. In a qualitative study, Lobban et al. (2012) found that many individuals reported positive experiences of mania such as enhanced abilities and greater connection to others, with a theme of feeling that they had been “given a special gift”. An international online survey of 103 people with bipolar disorder found that one in four did not want to completely remove of their bipolar disorder, and less than half wanted complete control of their mood (Folstad & Mansell, 2019). These views were associated with beliefs about bipolar disorder being part of their identity and increased abilities and feelings of fun when manic (Folstad & Mansell, 2019). Finally a study by Lam et al. (2005) administered a ‘sense of hyper positive self -scale’ which asks individuals to rate personal attributes they link to being in a ‘high state’ such as I am confident, entertaining, optimistic and creative’, found that higher scores on this predicted reduced benefit from Cognitive Behavioural Therapy (CBT) for bipolar disorder.

The Integrative Cognitive Model of bipolar disorder and mood swings (Mansell et al., 2007) proposes that extreme and personalised beliefs about internal states - such as racing thoughts and increased energy - can lead to full relapse, because the individual implements ‘ascent behaviours’ that increase mood further. For example, somebody who notices increased energy and confidence, and gets a sudden idea for a business scheme interprets this as “This is a great idea: I have to act on it now and change my life”, and then engages in behaviours such as staying up all night writing a business plan and talking to strangers about their idea, which further elevates mood. Beliefs about the perceived benefits of (hypo)mania are therefore potentially important to the maintenance of mood stability. However despite evidence for a role of these appraisals in bipolar disorder, much of the research has studied non clinical populations, and there is limited longitudinal research in the area (Kelly, Dodd, & Mansell, 2017)

Previous qualitative research has demonstrated that some individuals with bipolar disorder see it as part of their identity whilst others see it as separate from themselves (Lobban, Taylor, Murray, & Jones, 2012). Many also report that having bipolar disorder distorts their sense of self with individuals being unsure what is part of ‘them’ and part of their illness (Inder et al., 2008). Such beliefs are not included in measures of hypomanic appraisals such as the Brief HAPPI (Mansell & Jones, 2006), and the Hypomanic Interpretations Questionnaire (Jones, Mansell, & Waller, 2006), and there has been no research, to our knowledge, looking at whether such beliefs impact changes in mood over time. This study therefore aims to examine the impact of a specific belief about mania, that being high is a natural part of one’s personality, hypothesizing that such a belief is positively correlated with established measures of appraisals about mood changes, and this endorsement of this belief predicts an increase in manic symptoms over time.

Methods

Further information on methods can be found in the supplementary online section.

Design

This study was a secondary analysis of existing data which looked at correlates of financial difficulties in Bipolar disorder over time (Richardson et al., 2018)

. The original study was a longitudinal survey based design with two time points over four months.

Participants

The sample was 40 individuals who completed both time points, and were under a National Health Service secondary care mental health team for adults as outpatients, with a formal diagnosis of bipolar disorder by a psychiatrist. Inclusion criteria was aged 18 and above (there was no maximum age for participation, ages ranged from 20-69 with a mean of 48.4 years ($SD=11$), at any stage of illness so long as they were able to give informed consent to take part. There was no exclusion criteria in terms of comorbid diagnoses. The sample was 68.5% ($n=37$) female, 85.2% ($n=46$) white ethnicity, 55.6% ($n=30$) had a diagnosis of Bipolar type I, 18.5% ($n=10$) Bipolar type II, 22.2% ($n=12$) Bipolar unspecified and 3.7% ($n=2$) Bipolar disorder with psychotic symptoms, 33.3% ($n=18$) had a comorbid diagnosis. Ethical approval was obtained by an NHS research ethics committee (REC reference= 15/SC/0436) and the University of X and full written consent was given prior to participation.

Measures

The following measures were used at both time points:

- The Altman self-rating mania scale (Altman et al., 1997): A self-report measure of manic symptoms over the past week, with items such as self-confidence with ratings from “I do not feel more self-confidence than usual” to “I feel extremely self-confident all of the time”, and higher scores representing more severe current manic symptoms, $\alpha=.78$.
- The Brief Hypomania and Positive Predictions Inventory (Brief-HAPPI) (Mansell & Jones, 2006): A 30-item measure of appraisals of internal states, developed from the Integrative Cognitive Model (Mansell et al., 2007). Items such as “When I feel full of energy I am extremely funny and witty” are rated on a likert scale from 0 to 100 with higher scores representing more extreme appraisals. The total score for ‘forward’ items which measure positive beliefs mania was used, without filler items (which were added to test for response acquiescence and were not included and analysed in the original paper) $\alpha=.83$.
- An author-constructed question was developed: “To what extent do you feel like being ‘high’ is a natural part of your personality” with a rating scale from 0 (not at all) up to 10 (a lot), with 5 being labelled as ‘somewhat’.

Statistical Analysis

Missing data was filled in with mode substitution. All measures were normally distributed with kurtosis and skewness between -2 and +2. One-tailed Pearson’s correlations were used for data at baseline. A partial correlation was conducted for analyses over time, correlating baseline natural personality question with time 2 mania symptoms after controlling for baseline mania symptoms. A power calculation showed that 40 participants could detect a partial correlation of .4 with .82 power.

Results

Scores on the natural personality question ranged from 0 to 10 out of 10, $M=5.2$ ($SD=2.72$) with 5 being labelled as ‘somewhat’. Descriptive statistics for the other variables are shown in online supplementary table 1. As an indication of construct validity, the question about being high being a natural part of personal personality question was positively correlated with total items about mania from the brief HAPPI: $r=.34$, $p<.05$, one-tailed. As an indication of stability over time, the natural personality question at baseline was moderately correlated with the natural personality question at time 2: $r=.42$, $p<.01$, one-tailed. There was non a statistically significant correlation between belief of being high as a natural part of one’s personality to correlate with higher manic symptoms at baseline: $r=.20$, $p>.05$, one-tailed. However, when manic symptoms were assessed at time 2, this correlation was stronger and statistically significant, $r=.36$, $p<.05$, one-tailed.

A partial correlation was conducted to test the hypothesis that the natural personality question at baseline predicted manic symptoms at time 2, after controlling for baseline manic symptoms there remained a significant correlation, $r=.30$, $p<.05$, one-tailed.

Discussion

This study aimed to examine the correlates of a specific belief in bipolar disorder, that being ‘high’ is a natural part of one’s personality. The results show a normally distributed range of scores on the item, and a moderate correlation over 4 months, suggesting modest stability over time.

The significant and moderate correlations with other appraisals about mood, as measured by the brief HAPPI (Mansell & Jones, 2006), suggest an overlap with other problematic appraisals around mood. There was a non-significant correlation between current manic symptoms and the belief about natural personality at baseline, but a significant

correlation with manic symptoms four months later. This suggests that this belief might not be a consequence of elevated mood, but actually may have a role in elevating mood over time. As predicted, we found that this belief about high moods being a natural part of personality correlated with manic symptoms four months later, after controlling for baseline manic symptoms. This study is therefore in line with the integrative cognitive model of mood swings (Mansell et al., 2007), by suggesting a role of this specific appraisal about high moods being a natural part of personality then impacting mood changes over time. There is a lack of sufficient longitudinal evidence for this model, so this paper adds to the literature on the relationships between appraisals of mood and subsequent changes in mood symptoms over time.

There is a potential overlap between this and the idea of ‘self as context’ and ‘self as content’ within the Acceptance and Commitment Therapy literature: specifically this natural personality question may overlap with whether people feel they *have* bipolar disorder: An illness that is separate to them and their identity or if they *are* bipolar: with this being an inseparable part of the self for them. Previous research has shown those with bipolar disorder often see it as being related to their sense of self and identity (Lobban et al., 2012). Reduced medication adherence could also be a mechanism whereby those who believe they are naturally high are more likely to stop taking medication which then impacts mood. The specific mechanisms of this belief are unclear at this time and warrant further research.

An alternative perspective on our findings is that the belief that bipolar disorder reflects one’s natural personality is, to some degree, an accurate perception of the genetic endophenotype that raises the risk of developing bipolar disorder. **Moreover, there is evidence that the experience of manic symptoms is *positively* associated with personal recovery in people with bipolar disorder, when other factors such as anxiety are accounted for (Kraiss et al., 2021).** Indeed, a fruitful line of transdiagnostic research should investigate the degree to which beliefs that the symptoms of *any* mental disorder diagnosis is a natural part of one’s

personality (e.g. compulsions in obsessive compulsive disorder, restricted eating in anorexia nervosa) predict maintenance of the symptoms of the disorder over time, and attempt to control for the genetic markers of these conditions.

This study was limited by a small sample size. Power analysis showed that with 40 participants and a correlation of $r=.36$ this current study had a power of .75. However replication with a larger sample is warranted. A longer follow-up would also be beneficial, in particular to show an impact on relapse rates and possibly hospitalisation rather than just self-reported symptoms. It is also unclear how the high level of female participants, and high numbers of Bipolar I participants and comorbidities in the sample have influenced the results. There may also have been confounding factors such impulsivity and emotional instability which were not controlled for. Only a single item was used to assess this belief, which would have limited statistical power, and the development of a fuller measure of such positive beliefs about mania may be useful for future research.

In conclusion, this study suggests that those with bipolar disorder have a range of levels of agreement with the belief that being high is a natural part of their personality. This appears to be relatively stable over time and to be associated with increased manic symptoms over time. This suggests that psychological therapies such as CBT, family therapy and group based psychoeducation, could all be supplemented by targeting this specific belief. For example, using socratic questioning to ask help the client about identify aspects of their identity without which are unrelated to bipolar disorder. Mood diaries could also be used to demonstrate mood change changes over time and periods of stability to challenge the idea that a client is 'naturally high'. -and-working collaboratively to identify and distinguish parts of personality and day-to-day emotional changes from becoming unwell as part of bipolar disorder.

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Table 1: Descriptive Statistics for Key Variables

Measure	Mean	SD	Minimum	Maximum	Range
Natural Personality baseline	5.2	2.72	0	10	10
Altman mania total baseline	4.1	4	0	16	16
HAPPI forward total baseline	700.7	235.3	30	1120	1090