

The above method uses four senses in a chronological way when performing a DRE. The omitted sense is taste, but since smell is a large constituent of taste, you should remember that the next time you smell a maleana you are experiencing the taste as well!

CONCLUSION

The above findings for each of the senses are not intended to be exhaustive, but highlight the questions and answers that can arise from using all your senses when performing a DRE. Combined with an adequate history it can clinch a diagnosis, avoiding unnecessary, expensive tests and investigations, or indeed leading to more appropriate investigations. Furthermore I hope the classification above provides some insight into exactly why a DRE is so important and may help in informed consent when performing one on a patient.

REFERENCES

1. Talley NJ OCS.
The Gastrointestinal System.
Clinical examination: A systematic guide to physical diagnosis. 5th ed. Sydney: Churchill Livingstone, 2006.
2. Steggall MJ.
Digital rectal examination.
Nurs Stand 2008;22(47):46-8.
3. Akdas A, Tarcan T, Turkeri L, Cevik I, Biren T, Gurmen N.
The diagnostic accuracy of digital rectal examination, transrectal ultrasonography, prostate-specific antigen (PSA) and PSA density in prostate carcinoma.
Br J Urol 1995;76(1):54-6.
4. Ang CW, Dawson R, Hall C, Farmer M. **The diagnostic value of digital rectal examination in primary care for palpable rectal tumour.**
Colorectal Dis 2008;10(8):789-92.
5. Esposito TJ, Ingraham A, Luchette FA, Sears BW, Santaniello JM, Davis KA, et al.
Reasons to omit digital rectal exam in trauma patients: no fingers, no rectum, no useful additional information.
J Trauma 2005;59(6):1314-9.
6. Smith DS, Catalona WJ.
Interexaminer variability of digital rectal examination in detecting prostate cancer.
Urology 1995;45(1):70-4.
7. Seidel HM BJ, Dains JE, Benedict GW.
Mosby's Guide to Physical Examination.
6th ed. Philadelphia Mosby, 2007.
8. Romero FR, Romero KR, Brenny FT, Pilati R, Kulysz D, de Oliveira Junior FC.
Reasons why patients reject digital rectal examination when screening for prostate cancer.
Arch Esp Urol 2008;61(6):759-65.
9. Macias DJ, Sarabia MJ, Sklar DP.
Male discomfort during the digital rectal examination: does examiner gender make a difference?
Am J Emerg Med 2000;18(6):676-8.



Hypomania: A brief review of conceptual and diagnostic issues

Thomas Hugh Richardson
 Research assistant
 Mental Health Research and Development Unit
 University of Bath, England

Thomas Hugh Richardson completed his undergraduate Psychology degree at Trinity College Dublin, Ireland, graduating with a first class honours in 2008. The paper submitted is based on a literature review undertaken as part of his final year dissertation research project entitled: "Hypomania: epidemiology and relationships with substance abuse, impulsivity and risk-taking behaviours". Thomas has worked widely in the area of mental health, working with a range of mental illnesses. Thomas has also been involved in a number of research projects, and is currently working as a research assistant at the University of Bath, England, investigating CBT based computer programs to help with depression and anxiety in adolescents. Thomas now lives in south west England where he grew up, and intends to study to become a clinical psychologist in the U.K. National Health Service.

Historical descriptions

Ideas of hypomania have existed for over 2000 years¹, while Hippocrates formed concepts of mania in the 5th century BC. In the 1st century, the Greek physician Aretaeus classed 'mania' and 'melancholia' as two opposites on a spectrum of the same disease¹. However, modern concepts of such a spectrum as representing 'bipolar disorder' did not arise until much later. This concept was studied in the 19th century when Falret in 1854 and Hecker in 1898 described the symptoms of hypomania in detail^{2,3}. The term 'hypomania' was first used by Mendel in 1881⁴, followed by a classic description by Kraepelin a decade later, who introduced the term 'Manic Depression' in his book published in 1921⁵. Also in 1921, Kretschmer described the premorbid personality features of those who develop bipolar disorder⁶. The term 'bipolar disorder' was first used by Karl Leonhard in 1957⁷, but this was not introduced as a diagnosis until 1980. Despite the early descriptions of hypomania, there are still a number of diagnostic controversies in the area, and this is reflected in the differences between the two most common diagnostic systems, ICD-10 and DSM-IV-TR.

Hypomania: symptoms and diagnoses

As Figure 1 demonstrates, according to the DSM-IV-TR, a 'hypomanic episode' is a mental illness characterised by symptoms such as flight of ideas, a decreased need for sleep, elation, grandiosity, talkativeness, and an increase in goal-directed activity. These symptoms occur within an elevated or irritable mood which lasts at least 4 days. This mood and behaviour is different from the way the person normally behaves, which is obvious to others. These effects do not cause significant impairment in social or occupational functioning, and are not directly due to physiological mechanisms. Multiple hypomanic episodes with multiple episodes of major

depression leads to a diagnosis of bipolar II disorder; whereas multiple manic episodes often with multiple episodes of major depression leads to a diagnosis of bipolar I disorder. If an individual frequently fluctuates between hypomanic and depressive symptoms then a diagnosis of cyclothymic disorder is appropriate. Thus it is necessary to examine full history of both depressive and manic/hypomanic symptoms of a patient to deduce appropriate diagnosis.

There are a number of similarities between the DSM-IV-TR and ICD-10 criteria. For example, the ICD-10 also describes elation of mood, talkativeness and irritability as key symptoms. Additionally, both the ICD-10 and DSM-IV-TR hold that psychotic symptoms such as hallucinations and delusions cannot be present. However, there are a number of differences in the criteria, for example the ICD-10 does not place emphasis on the duration of hypomania as part of diagnostic criteria. This is in line with research demonstrating that this criterion is unnecessary as an accurate diagnosis can be made without taking into account duration⁸, and the majority of hypomanic episodes occur for less than 4 days⁹.

Mania-Hypomania Distinction

The distinction between mania and hypomania is poorly defined, complicating diagnosis. However, this distinction is important as depression with hypomanic episodes will lead to a diagnosis of bipolar II, whilst depression with mania leads to a diagnosis of bipolar I disorder. Both disorders have different prognoses, and require different treatment¹. Thus clear diagnostic criteria are needed, but are often indistinct. This occurs in research, and also clinical practice¹⁰. The DSM-IV-TR criteria are virtually identical, characterising hypomania as a lesser degree of manic intensity than mania. Therefore the diagnostic distinction between the two is that a hypomanic episode is not severe enough to cause marked impairment in social or occupational functioning, or to require hospitalisation, and that there are no psychotic features⁷. The ICD-10 takes a similar stance in terms of differentiating the two by emphasising that any "Severe or complete" negative impact on functioning would differentiate the two, though the ICD-10 does suggest that "considerable interference" is possible in hypomania^{11,12}. However the key difference is that the ICD-10 essentially describes hypomania as a more severe mental illness than the DSM-IV-TR. As a result, ICD-10 essentially lowers the threshold between hypomania and mania. As Goodwin¹⁰ puts it; "In ICD-10 hypomania is an almost superfluous term that describes mild mania, whereas DSM-IV offers us something different".

Many of these diagnostic distinctions between hypomania and mania have been challenged. For example, whilst a number of authors have found that hospitalisation distinguishes the two¹³, it could be argued that hospitalisation is an artificial and meaningless criterion, as this may depend on irrelevant factors such as number of beds available. Also, it is generally

Figure 1: DSM-IV-TR criteria for a Hypomanic Episode

DSM-IV-TR criteria for a Hypomanic Episode
A. Distinct period of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 4 days, that is clearly different from the usual nondepressed mood.
B. During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree: <ul style="list-style-type: none">(1) Inflated self-esteem or grandiosity(2) Decreased need for sleep (e.g. feels rested after 3 hours of sleep)(3) More talkative than usual or pressure to keep talking(4) Flight of ideas or subjective experience that thoughts are racing(5) Distractibility (i.e., attention, too easily drawn to unimportant or irrelevant external stimuli)(6) Increase in goal-directed activity (either socially, at work or school, or sexually, or psychomotor agitation)(7) Excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)
C. The episode is associated with an unequivocal change in functioning that is characteristic of the person when not symptomatic.
D. The disturbance in mood and the change in functioning are observable to others.
E. The episode is not severe enough to cause marked impairment in social or occupational functioning, or to necessitate hospitalisation, and there are no psychotic features.
F. The symptoms are not related to the direct physiological effects of a substance (e.g., a substance, a medication, or other treatment) or a general medical condition (e.g., hyperthyroidism).

accepted that psychosis and the consequential negative effects on social or occupational functioning only occurs in mania, though this is controversial, as there is evidence to link hypomanic episodes with significant negative consequences¹⁴, as will be discussed in greater detail later. Whilst flight of ideas is held to be present in both hypomania and mania, flight of ideas is less frequent in hypomania than mania, and such thinking patterns vary considerably between the two¹⁵. The concept that hypomania is essentially a milder form of mania is also controversial, as hypomanic symptoms frequently fail to present in the way assumed by diagnostic criteria which are developed from the criteria for manic episodes¹⁶. Whilst the DSM-IV, and to an extent the ICD-10, assume that the symptoms are the same, factor analysis suggests there may be differences both in the prevalence of specific symptoms and their clusters in hypomania and mania^{17,18,19}. Evidence from a number of lines of evidence suggests that hypomania is more than simply a less severe form of mania.

However, many of the diagnostic distinctions between hypomania and mania have proved to be correct. Kessing²⁰ found that mania was associated with a longer hospitalisation than hypomania. Other research has shown that hypomania rarely requires hospitalization¹³. Also there is clear a relationship between mania and hypomania. Whilst mania is associated with a longer recovery, hypomania and mania have the same risk of relapse²⁰. Both hypomania and mania can present with depressive symptoms, leading to the diagnosis of a mixed episode. The risk of hypomania ultimately increases the risk of mania, as 5-15% of individuals with hypomania will ultimately develop a manic episode¹², and those with bipolar I disorder

Figure 2: ICD-10 criteria for Hypomania

ICD-10 criteria for Hypomania
A disorder characterized by a persistent mild elevation of mood, increased energy and activity, and usually marked feelings of well-being and both physical and mental efficiency. Increased sociability, talkativeness, over-familiarity, increased sexual energy, and a decreased need for sleep are often present but not to the extent that they lead to severe disruption of work or result in social rejection. Irritability, conceit, and boorish behaviour may take the place of the more usual euphoric sociability. The disturbances of mood and behaviour are not accompanied by hallucinations or delusions.

will cycle between euthymia, hypomania and mania during the course of their illness. Despite the general consensus that mania is associated with more psychotic features than hypomania, a greater risk of hospitalisation and more negative consequences, clearer differentiation between the two may be necessary for DSM-V and ICD-11. These differences between hypomania and mania are important for clinicians to consider, in order to ensure accurate differential diagnosis and subsequent effective treatment.

Does 'unipolar hypomania' exist?

An understudied area in bipolar disorder is the possibility of unipolar hypomania or mania, where one would meet the diagnostic criteria for episodes of mania or hypomania, but not depression. A DSM-IV-TR diagnosis of Bipolar II disorder assumes the presence of depressive episodes, and the criteria for bipolar I disorder states that depressive episodes often accompany manic episodes. Those with hypomania but not depression can be placed in the Bipolar Disorder Not Otherwise Specified category¹². Klerman²¹ found evidence to support the concept of unipolar mania, and Solomon et al²² found that 18.5% of patients over a 20 year period initially diagnosed as suffering from a manic episode did not suffer from depression, further supporting the notion of unipolar mania. The only estimate of a population prevalence of unipolar hypomania was Angst et al²³ who found that, over 20 years, 3.3% suffered 'pure hypomania', and 0.97% of the population manifested hypomanic symptoms without qualifying for a diagnosis of any form of depression. However, this area is still greatly understudied, with the only epidemiological research on the area being conducted within the population of Zurich, Switzerland. It is important to consider the possibility that those presenting with hypomanic symptoms may not suffer from depressive episodes, and thus may not meet the full DSM-IV-TR criteria for bipolar II disorder. Such a possibility is addressed by the ICD-10, which includes the potential diagnosis of 'Bipolar affective disorder- current episode hypomanic', where previous episodes necessary for such a diagnosis can be hypomanic, manic, depressed or mixed.

The 'broad spectrum' of bipolar disorders

Some in the academic community have evolved from a categorical to a continuum conceptualisation of bipolar disorders. Taylor & Abrams²⁴ were the first to urge for a broader concept of bipolar disorder. As a result the concept of a 'soft bipolar spectrum' developed²⁵ which goes beyond descriptions of classic mania, and broadens the definitions of bipolar II disorder to incorporate depression with mild hypomanic episodes. The DSM-IV and ICD-10 categorical classification has been criticised, with individuals arguing that bipolar symptoms are present in a continuum within the general population, and that there is a spectrum of manic conditions going from classical psychotic mania through to sub-clinical forms of hypomania²¹. The Zurich study²⁶ supports this spectrum concept, showing that hypomanic symptoms are highly prevalent in varying degrees throughout the population. The Zurich study also developed its own 'strict' and 'broad' criteria for hypomania which have been applied to research²⁷.

Additionally, there is evidence to suggest that a broad bipolar spectrum is also present in clinical populations²⁸. More recently, Akiskal and Akiskal²⁹ has noted that melancholic depression has many of the same risk factors as hypomania, and argued that melancholia should become part of the bipolar spectrum. Akiskal and Akiskal²⁹ argue that melancholia often represents a mixed bipolar state, and it is often associated with varying dimensions of hypomania and psychosis. Akiskal and Benazzi³⁰ found evidence which they claim suggests that both DSM-IV-TR and ICD-10 classifications of unipolar and bipolar disorder lie on a spectrum, and thus categorical distinctions between the two may not be valid. Another relevant concept is the notion of a 'hypomanic personality', where individuals are energetic, emotional, overly confident, extraverted, impulsive and ambitious³¹. Such a personality has been shown to be predictive of bipolar disorder up to 13 years later³². This concept of a bipolar spectrum suggests that such symptoms have a wide distribution within the general population. There has been little epidemiological research into such soft bipolar conditions, nevertheless it is important for clinicians to understand that as hypomanic symptoms are present on a continuum, the diagnostic threshold for hypomania may be essentially arbitrary and somewhat subjective. Thus it is important to consider the possibility of a threshold effect - a small number of additional symptoms may lead to a positive or negative diagnosis of bipolar disorder. However, once diagnostic criteria are met, any symptoms beyond this are not taken into account. As a result, a number of authors have suggested that the DSM-V and ICD-11 need to include dimensions into the diagnostic criteria for bipolar disorder so that specific symptoms are scored on a scale of severity³³.

Positive and Negative consequences of hypomania

Unlike mania, the DSM-IV-TR states that hypomania, is not associated with significant deterioration of functioning¹². Similarly the ICD-10 holds that mania is associated with greater disruption than hypomania. However, a body of research has examined the effects of hypomania on the individual, discovering negative effects of such behaviours. In adolescents, hypomanic episodes are associated with antisocial behaviour, drug use and truancy¹². Akiskal & Pinto³⁴ conducted a factor analysis of hypomanic symptoms, finding what they term the 'dark side' of hypomania. This included variables such as irritability, impatience, increased sex drive, excessive spending, and increased consumption of alcohol, cigarettes and coffee. Hypomanic symptoms have been found to increase lifetime health service usage, need for social welfare and disability benefits, and elevate suicidal risk¹⁴. Hypomania is also related to marital disruption, with the divorce rate being 6 times higher in hypomanics compared to controls²⁶. Hypomanic individuals often receive very negative comments from those close to them about their behaviour, but can be oblivious to this³⁵. Thus there is evidence to suggest the need to revise the DSM-IV-TR diagnostic criteria with regards to negative consequences may need revision, and perhaps should be brought in line with ICD-10 criteria which allows for mild but not severe disruption of functioning. Subsequently it is important to note that hypomania can lead to negative consequences if not treated rapidly and effectively.

Research has suggested occasional positive consequences to hypomanic behaviours. Akiskal & Pinto's³³ factor analysis also found evidence for a 'sunny side' of hypomanic symptoms, including socially positive and advantageous effects such as more drive and energy, increased social activity, increased talkativeness and more likely to laugh. There is often improved functioning associated with hypomania³⁶, including socially desirable symptoms, and increased charisma and leadership skills³⁷. It has been argued that hypomania is in fact adaptive³⁸. John Gartner in his book "The hypomanic edge; the link between a little craziness and a lot of success in America" reviews the histories of a number of important figures in American history, finding that they display increased hypomanic symptoms³⁹, supporting the argument that there are benefits to a hypomanic temperament. This is important for clinicians to consider, as the positive symptoms sometimes linked to hypomania may mean that patients are reluctant to seek treatment and adhere to a treatment regimen, and families and friends may find it harder to recognise these 'positive' symptoms as part of a clinical condition.

CONCLUSION

In conclusion, despite hypomania being described for hundreds of years, a number of diagnostic and conceptual issues remain, with differing conceptualisations in the DSM-IV-TR and ICD-10 comparatively. The symptoms and related diagnoses are often controversial; in particular what distinguishes mania from hypomania, and whether such a diagnostic distinction is in fact valid. A related point is whether hypomania always occurs as a part of bipolar II disorder, occurring with recurrent depressive episodes, or whether individuals can be a 'unipolar hypomanic'. Whether hypomania and related bipolar disorders should be classed categorically or on a continuum is controversial, and is limited by the lack of epidemiological research within the general population in this area. Finally, the positive versus negative consequences of hypomania are disputable, in particular because diagnostic criteria assume that such negative consequences are rarely associated with hypomania. These issues need to be taken into account by clinicians to inform effective diagnosis and treatment of hypomania, and also to help guide future research. Such diagnostic difficulties will be particularly important during the construction of the DSM-V and ICD-11 which are currently under way.

REFERENCES

1. Thomas P.
The many forms of bipolar disorder: a modern look at an old illness.
Journal of Affective Disorders 2004; 79:3–8.
2. Sedler MJ.
Falret's discovery: the origin of the concept of bipolar affective illness.
American Journal of Psychiatry 1983; 140:1127-33.
3. Koukopoulos, A. (2003).
Ewald Hecker's description of cyclothymia as a cyclical mood disorder: its relevance to the modern concept of bipolar II.
Journal of Affective Disorders 2003; 73:199-205.
4. Mendel E.
Die Manie, Eine Monographie.
Urban & Schwarzenburg, Wien, Leipzig, 1881.
5. Kraepelin E.
Manic-depressive insanity and paranoia.
Edinburgh, UK: Livingstone, 1921.
6. Kretschmer E.
Körperbau und Charakter [Physique and character].
Berlin: Springer, 1921.
7. Leonhard K.
Aufteilung der Endogenen Psychosen [The classification of endogenous psychoses].
Berlin: Akademie-Verlag, 1957.
8. Angst J, Gamma A, Benazzi F, Ajdacica V, Eicha D.
Toward a re-definition of subthreshold bipolarity: epidemiology and proposed criteria for bipolar-II, minor bipolar disorders and hypomania.
Journal of Affective Disorders 2003; 73:133–146
9. Benazzi F.
Is 4 days the minimum duration of hypomania in bipolar II disorder?
European Archives of Psychiatry and Clinical Neuroscience 2001; 251:32–34.
10. Goodwin G.
Hypomania: what's in a name?
British Journal of Psychiatry 2002; 181:94–95.
11. **World Health Organisation: International Classification of Diseases.**
Available from: <http://www.who.int/classifications/icd/en/>
12. **American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision.**
Washington, DC, American Psychiatric Association, 2000.
13. Dunner DL, Gershon ES, Goodwin FK.
Heritable factors in the severity of affective illness.
Biological Psychiatry 1976; 11:31- 42.
14. Judd JL, Akiskal, HS.
The prevalence and disability of bipolar spectrum disorders in the US population:

re-analysis of the ECA database taking into account subthreshold cases.
Journal of Affective Disorders 2003;73:123–131.

15. Benazzi F.
Bipolar disorder-focus on bipolar II disorder and mixed depression.
The Lancet 2007; 369:935-945.

16. Cassano GB, Rucci P, Frank E, Fagiolini A, Dell'Osso L, Shear, MK, et al.
The mood spectrum in unipolar and bipolar disorder: arguments for a unitary approach.
American Journal of Psychiatry 2004;161:1264 - 9.

17. Bauer MS, Crits-Christoph P, Ball WA, Dewees, E, McAllister T, Alahi P, et al.
Independent assessment of manic and depressive symptoms by self-rating. Scale characteristics and implications for the study of mania.
Archives of General Psychiatry 1991; 48:807-812.

18. Cassidy F, Forest K, Murry E., Carroll BJ.
A factor analysis of the signs and symptoms of mania.
Archives of General Psychiatry, 1998;55:27-32.

19. Benazzi F., Akiskal HS.
The dual factor structure of self-rated MDQ hypomania: energized-activity versus irritable-thought racing.
Journal of Affective Disorders 2003;73:59–64.

20. Kessing LS.
Subtypes of manic episodes according to ICD-10—prediction of time to remission and risk of relapse.
Journal of Affective Disorders 2004;81:279– 285.

21. Klerman GL.
The spectrum of mania.
Comprehensive Psychiatry 1981;22:11–20.

22. Soloman DA, Leon AC, Endicott J, Coryell WH, Mueller TI, Posternak MC, Keller MB.
Unipolar Mania Over the Course of a 20-Year Follow-Up Study.
American Journal of Psychiatry 2003;160:2049–2051.

23. Angst J, Gamma A, Benazzi F, Ajdacica V, Eicha D, Rossler W.
Toward a re-definition of subthreshold bipolarity: epidemiology and proposed criteria for bipolar-II, minor bipolar disorders and hypomania.
Journal of Affective Disorders 73;2003:133–146.

24. Taylor MA, Abrams R.
Reassessing the bipolar–unipolar dichotomy.
Journal of Affective Disorders 1980;2:195–217.

25. Akiskal HS, Mallya G.
Criteria for the 'soft' bipolar spectrum: treatment implications.
Psychopharmacology Bulletin 1987;23:68–73.

26. Angst J.
The emerging epidemiology of hypomania and bipolar II disorder.
Journal of Affective Disorders 1998;50:143-151.

27. Angst J, Adolfsson R, Benazzi F, Gamma A, Hantouche E, Meyer TD, Skeppar P, Vieta E, Scott J.
The HCL-32: Towards a self-assessment tool for hypomanic symptoms in outpatients.
Journal of Affective Disorders 2005;88:217–233.

28. Cassano GB, Akiskal HS, Savino M.
Proposed subtypes of bipolar II and related disorders: with hypomanic episodes (or cyclothymia) and with hyperthymic temperament.
Journal of Affective Disorders 1992;26:127–140.

29. Akiskal HS, Akiskal KK.
A mixed state core for melancholia: an exploration in history, art and clinical science.
Acta Psychiatr Scand 2007; 115 (Suppl. 433):44–49.

30. Akiskal HS, Benazzi F.
The DSM-IV and ICD-10 categories of recurrent [major] depressive and bipolar II disorders: Evidence that they lie on a dimensional spectrum.
Journal of Affective Disorders 2006; 92:45-54.

31. Eckblad M, Chapman LJ.
Development and validation of a scale for hypomanic personality.
Journal of Abnormal Psychology 1986;95:214–222.

32. Kwapil TR, Miller MB, Zinser MC, Chapman LJ, Chapman J, Eckblad M.A
Longitudinal Study of High Scorers on the Hypomanic Personality Scale.

Journal of Abnormal Psychology 2000;109(2):222-226.

33. Vieta E, Phillips ML.
Deconstructing Bipolar Disorder: A Critical Review of its Diagnostic Validity and a Proposal for DSM-V and ICD-11.
Schizophrenia Bulletin 2007; 33(4):886–892.

34. Akiskal, HS, Pinto, O.
The evolving bipolar spectrum. Prototypes I, II, III, and IV.
Psychiatric Clinics of North America 1999; 22:517–534.

35. Angst J, Gamma A, Hantouche E, Benazzi F.
20 years of the Zurich Study: lessons for screening and understanding the bipolar spectrum.
AoA 2005;1(2):109-115.

36. Benazzi F, Akiskal HS.
Refining the evaluation of bipolar II: beyond the strict SCID-CV guidelines for hypomania.
Journal of Affective Disorders 2003;73:33–38.

37. Angst J, Cassano G.
The mood spectrum: improving the diagnosis of bipolar disorder.
Bipolar disorders 2005, 7(Suppl.4):4-12.

38. Jamison KR, Gerner RH, Hammen C, Padesky C.
Clouds and silver linings: positive experiences associated with primary affective disorders.
American Journal of Psychiatry 1980;137:198–202.

39. Gartner JD.
The Hypomanic Edge: the link between a little craziness and a lot of success in America.
Simon and Schuster, New York, 2005.

