Received: 6 July 2022 | Revised: 19 August 2022 | Accepted: 10 October 2022

DOI: 10.1002/pcn5.53

INVITED REVIEW

PCN Reports
Psychiatry and Clinical Neurosciences
Open Access

The significance of mixed states in mania and depression: From the psychopathological viewpoint of Tadao Miyamoto

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Abstract

This article introduces the concept proposed by the eminent second-generation Japanese psychopathologist Tadao Miyamoto in 1992 that the manic-depressive mixed state is the basic psychopathology of manic-depressive illness. When Kraepelin first established the dichotomy between schizophrenia and manic-depressive illness, mania and depression were placed in a symmetrical relationship. Now, in Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5), manic-depressive illness is divided into two distinct categories: bipolar and related disorders, and depressive disorders. Miyamoto pointed out that even in the average depressed state there is a manic-depressive mixed state and listed the following findings. The depressed mood of depression is itself a major fluctuation, but is constantly subject to more or less subtle fluctuations or swaying. What occurs in association with the incessant fluctuations of mood dysphoria are restlessness, agitation, irritability, and excitement, which manifest in a unique way in combination with a depressive mood. In depressive delusions, ideations of belittlement are developed in an exaggerated manner. Miyamoto concluded that mixed states are not incidental or accessory to manic-depressive illness; on the contrary, they may form a core component of manic-depressive illness.

KEYWORDS
agitation, delusion, depression, mania, mixed states

INTRODUCTION

When Kraepelin[1] established the dichotomy between schizophrenia and manic-depressive illness, mania and depression were placed in a symmetrical relationship as a single, tightly grouped disorder. In actual clinical practice, however, mania is much less common than depression and the relationship is not symmetrical either, with unipolar mania, but not unipolar depression, rarely presenting. Mania and depression, which were grouped together as affective disorders in diagnostic and statistical manual of mental disorders, 3rd edition (DSM-III)[2] and as mood disorders in DSM-IV,[3] are now the separate categories of bipolar and related disorders, and depressive disorders in DSM-5.[4] However, this does not mean that mania and depression have nothing to do with each other. Clinicians encounter the phenomenon of manic switch and, in particular, the presence of a bipolar mixed state suggests a close relationship between mania and depression. Mixed states, which Kraepelin himself described as *Mischform* (mixed form) in the fifth edition of his textbook,[1] are treated as a "specifier" in today's DSM-5. Some researchers still highlight their importance.[5–11]

This article introduces Tadao Miyamoto's theory of mixed states of mania and depression,[12] put forward in 1992, to the English-speaking world. Miyamoto (1930–1999) was a professor in the Department of Psychiatry at Jichi Medical University from 1973,

when the department was founded, until 1995. He counts as a major second-generation Japanese psychopathologist.

HISTORICAL PERSPECTIVES ON MIXED STATES

According to Marneros,[6] the origins of the concept of mixed states can be traced back to ancient times, and although there are descriptions of mixed states in the pre-Kraepelinian era, Kraepelin's work regarding mixed states was crucial to the development of modern psychiatry. Kraepelin[1] first introduced the concept of mixed state using the term "mixed forms." He divided the condition of manic-depressive illness into three components, thought disorder, mood disturbance, and motivation disorder, and described it as a state in which, for example, thought and motivation are depressed, but mood is manic. This is based on the concept of elemental psychology. Schneider,[13] on the other hand, flatly denied the existence of mixed states, arguing there is no such thing as a mixed manic-depressive state, only a rapid alternation or conversion between mania and depression, because cyclothymic depression and mania are not Typen (types) but Arten (kinds) in conflict with each other. According to Miyamoto, these ideas were conceived by the descriptive phenomenological school that developed in the 1910s and 1920s that sought to describe a phenomenologically homogeneous state by eliminating impure components, exceptional symptoms, and contingent elements as much as possible. However, while describing "pure mania" and "pure depression" in detail, Jaspers,[14] a proponent of the descriptive phenomenological school, contradicted this by stating that the more one looks in detail, the more "mixed states" one finds.

Miyamoto noted that as the phenomenological perspective permeated psychiatry, the concept of manic-depressive illness, which had been broadly constructed based on the clinical observations of Kraepelin and others, was gradually "purified" by a narrowing of scope and seemingly relegating the "impure" components excluded to a variety of atypical psychosis settings, such as the Frankfurt School's *zykloiden Psychose* (cycloid psychoses).[15] *Angst-Glücks-Psychose* (anxiety-trance psychosis), *Verwirrtheitspsychose* (confusion psychosis), and *Motilitätspsychose* (motor psychosis), all of which belong to this category of cyclical psychosis, show the involvement of mixed states. Over time, interest in mixed states gradually waned, to the point that very few researchers paid attention to mixed states after World War II. Later, there was something of a revival of the concept in Germany and France, and mixed states began to be included in operative diagnostic criteria such as international statistical classification of diseases and related health problems, 10th edition (ICD-10) in 1977 and DSM-III in 1980. However, it was a somewhat strict conceptualization of "the full symptomatic picture of both Manic and Major Depressive Episodes, intermixed or rapidly alternating every few days."[2]

Although these criteria were followed in DSM-IV, several researchers focused on the importance of mixed states with the aim of making the concept clinically useful. Cassidy et al.[5] noted that "pure" manic patients show substantial rates of dysphoria, lability, anxiety, and irritability. Benazzi[7] argued that to diagnose a depressive mixed state, it is useful to define it as a major depressive episode with three or more concurrent hypomanic symptoms.

In DSM-5,[4] a "mixed features" specifier can be added as needed, but the strictness of the criteria is somewhat lessened. This mixed features specifier still requires that the patient fully meet the criteria for a manic or hypomanic episode, or a depressive episode, but with at least three depressive or manic symptoms.

The new concept in DSM-5 is considered to overcome the problems arising from the extremely narrow definition in DSM-IV[9] and from underestimation of the clinical complexity and wide phenomenological variability of these conditions.[11] However, Vieta at al.[9] noted that it is unclear how the new concept may impact the bipolar-unipolar dichotomy and diagnostic reliability. In the English-language literature, many researchers do not seem to be free from the view that depression and mania overlap or are a mixture of opposing symptoms, as indicated by terms such as subsyndromal depressive symptoms,[10] subsyndromal manic symptoms,[8] agitated depression,[11] and depressive mixed state.[7] Miyamoto's theory of mixed states is an attempt to overcome the view of manic-depressive dichotomy.

In his 1992 work, Miyamoto[12] commented that as the scope of manic-depressive illness had expanded considerably in recent years, its symptomatic nature had become less and less clear, and that one way to recover from the "exhaustion of the concept of manic-depressive illness" was to revive the notion of mixed states. He argued that the mixed state must be considered as a more constant and basic phenomenon, and went on to develop the following considerations.

CLINICAL ASPECTS OF MANIC-DEPRESSIVE MIXTURE

Miyamoto[12] pointed out that while Kraepelin[1] had in mind a steady state of mixed states in which manic and depressive symptoms coexist, he contradicted himself by stating that mixed states are frequently seen, especially during the transitional phase of mania and depression.[1] Miyamoto attempted to extract the mixed state elements from the average depressive states, which are not directly related to the phase transition. He pointed out that the average depressive state can be presumed to be a mixed state, given that the following is observed: in the average depressive state, there are minute manic and depressive mood fluctuations, the inclusion of subtle manic symptoms, and the fusion of manic and depressive elements in ideation.

Constant vertical fluctuations and swaying in mood

The depressed mood (or the manic mood) is itself a major fluctuation, but this fluctuation does not pass in the form of a gentle curve. It is constantly subject to more or less subtle fluctuations or swaying. Miyamoto cited a schematic diagram of the depressive phase created by Kraines[16] (Figure 1). Well-known in clinical settings is diurnal

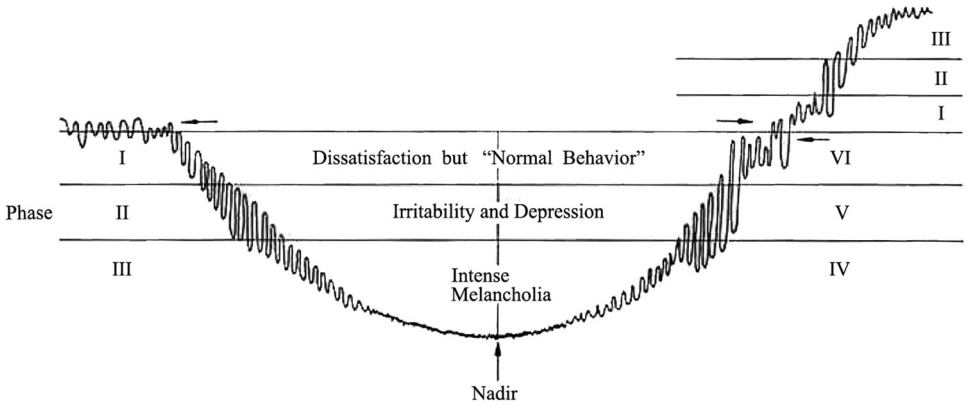

FIGURE 1 Schematic diagram of the depressive phase (Kraines, 1957)[16]

fluctuation, which has been regarded as an important indicator of endogenous mood dysregulation in German-speaking countries[17] and Japan, and is also listed as one of the characteristics of melancholic features in DSM-5. Tellenbach[18] also mentioned manic-depressive mixed states as well as diurnal fluctuations as a unique manifestation of the rhythmic fluctuations of the vital phenomena, namely something related to *Endon*. There is a clear continuity between diurnal and manic-depressive fluctuations: if diurnal fluctuations are more pronounced and come to the forefront of the disease picture, the condition would be diagnosed as a diurnal rapid cycler.

Laced with restlessness, agitation, and excitement

Every clinician is aware that what occurs in association with the incessant fluctuations of mood dysphoria are restlessness, agitation, irritability, and excitement, which manifest in a unique way in combination with a depressive mood. The condition of senile depressed patients is also well known—they are depressed and awaken unrefreshed, feel irritable, wander around the room, and reiterate complaints when family members approach. This type of "agitated depression" probably contributed greatly to the conceptualization of the mixed state. If it were "pure depression," all vital forces would descend and movement would become stagnant, so there must be an undifferentiated but simultaneously ascending, or manic, component involved in the state described above.

A state in which the manic component is prominent as one sudden manifestation is what was once called *raptus melancholicus*. Clinicians sometimes encounter cases in which depressed patients suddenly disappear one day, driving around or taking trains in search of a place to die. In this context, suicide or crime can often be caused by a mixed state.

Fusion of belittlement and grandeur in the ideation

In general, the delusions of depression, the so-called three major delusions, are collectively referred to as delusions of belittlement. Consider, for example, the origins of the delusion of culpability, which all stem from so-called *petites fautes* (minor faults) in the past, the hypochondriacal delusion, which stems from a minor health complaint, and the delusion of poverty, which starts from a minor expense on one's property. As far as this goes, even if it fulfills the name of "delusion of belittlement," the subsequent developments are exclusively exaggerated and exaggerated, and this exaggeration magnifies a minor problem into a delusion. It is not unreasonable to consider a patient's complaint of "I have committed a terrible crime by using the company's envelopes and phones for other purposes, so please turn me in to the police right now" as "delusion of grandeur." Tellenbach[18] proposed the term "delusion of guilt-grandeur" (*Schuld-Größenwahn*) and tried to explain this in terms of the order-seeking nature of the *Types melancholicus*, namely that the unusual extremity of the melancholic's evaluation of such a trivial matter plays a role in the preparation of his/her guilt-grandeur ideation.

There are many other findings that exemplify the manic-depressive mix. For example, it is not uncommon to hear a depressed patient say, "Whenever I feel down, I try to get up as much as I can and that makes me even more tired." It is not unusual to hear a manic patient say, "I don't want to keep talking like this, but I feel that if I stop, I will fall into a dark valley…So I don't enjoy it one bit." We have to keep in mind that there are cases where there is a discrepancy between the emotions that are admitted, even superficially, and the inner feelings. At any rate, apart from periods of rapid alternations, conversions, and transitions, a mixture of mania and depression can be observed in various forms.

MIXED STATE AS THE BASIC PATHOLOGY OF MANIC-DEPRESSIVE ILLNESS

It is not unreasonable to conclude that mixed states are not incidental or accessory to manic-depressive illness; on the contrary, they may be a core component of it. Although Kraepelin[1] noted that mixed states are extremely frequent and Jaspers[14] wrote that the more one examines them, the more frequent they become, it is not the frequency of mixed states that makes them the core symptom of

manic-depressive illness. The mixed state itself seems to originate from the most fundamental womb of emotions or moods and therefore consistently carries endogenous manifestations.

Miyamoto had in mind the concept of vital emotion (*Vitalgefühl*), which constitutes the most profound layer in the hierarchy of emotions analyzed by the German philosopher Max Scheler, and which Schneider introduced in detail in the 1920s in relation to manic-depressive illness.[19,20] Whereas the psychogenic depressive state is based on mental emotion (*seelisches Gefühl*) and therefore develops from the outset as a clear gloomy feeling, endogenous depression is based on the above-mentioned vital emotion, and although it permeates the entire body, it is thus less detailed as an emotion and remains as a vague, dull, bodily feeling. Even if it is an immature feeling, such as "I'm feeling sluggish and lazy today" or "I'm feeling heavy," it is an integral part of our lives and even the slightest disturbance can threaten the very foundation of our daily existence.

In both depression and mania, what is recognized in the initial stages is precisely this vague sense of discomfort, which cannot be limited to either depression or mania. It is a state that can only be described as a "mixed" or "blended" state, and this mixed state of vital emotion consistently forms the basis of the depressed or manic state that will eventually be established, echoing in a kind of basso continuo.

Miyamoto refrained from elaborating on the nature of the relationship between mania and depression in his 1992 text, since this relationship is somewhat different from the issues of mixed states he considered, and instead merely refers to Moriyama's theory of the internal relationship between mania and depression that was based on a mixed state case.[21] Referring to Binswanger's work "Traum und Existenz" ("Dream and Existence")[22] which described the ascent and fall of the direction of meaning in human existence, Moriyama[21] believed that mania or depression is the result of such upward and downward directions of meaning somehow falling into a state of conflict and eventually hardening in the form of a binary opposition. Miyamoto, however, questioned whether the universal theme of the directionality of meaning of human existence, as described by Moriyama, would be applicable to the medical condition of manic-depressive illness.

CURRENT SIGNIFICANCE OF MIYAMOTO'S VISION

Regardless of the relationship between mania and depression, Miyamoto's intention was to place a mixture of mania and depression at the basis of manic-depressive illness. Manic-depressive illness is an endogenous affective illness that has both manic and depressive poles. Miyamoto states that it is extremely difficult to distinguish between bipolar and unipolar depression, as some cases of so-called unipolar depression may show a manic phase over a lengthy period; in other words, even in unipolar depression, as long as it is endogenous, a mixture of emotions must potentially exist, and "unipolar" mania or depression can potentially be considered "bipolar." Starting with the publication of DSM-III in 1980, major depressive disorder and bipolar disorder were separated into different clinical sections on the basis of genetic clustering and other factors, but all forms of mania were incorporated under "bipolar disorder," and to this extent have some similarities with Miyamoto's argument. In DSM-5, however, bipolar disorder and depressive disorder, which had previously been grouped together under the names "affective disorder" and "mood disorder," were separated into different categories. This latest DSM definition is no longer compatible with Miyamoto's conception of depressive disorder having a bipolar component, that is, being a mixed state, however latent. From Miyamoto's standpoint, it is appropriate that all depressive disorders be resolved into bipolar disorder.

However, whether it is bipolar or depressive disorder, as long as clinicians are dealing with emotions and moods, they have to concern themselves with human affairs. Miyamoto's concept of "the most fundamental womb of emotion or mood" seems highly abstract, but something less than "most fundamental" may be recognized in the culture of each country. *Humor*, which is listed as a basic concept in German Romantic art theory, is described as a mixture of the funny and the serious, the comic and the sublime, the laughable and the sentimentality of love for it. The Polish word *Żal*, often used by Chopin to refer to the emotions in his music, is difficult to translate into many languages and contains complex emotions such as melancholy, nostalgia, resignation, conflict, rage, and indignation. In Korean culture, *han* expresses a variety of emotions, including resentment, regret, grief, impermanence, envy, and the desire to be freed from miserable circumstances. The ancient Japanese word *ahare* (*aware*) expresses sincerity, loneliness, sadness, affection, and mercy. Although these words cannot be easily translated into other languages, they indicate emotions that are close to the womb of emotions that we may all have and could be said to somewhat reflect a mixed state. From these more undifferentiated emotions, clearly definable emotions that can be translated into multiple languages may emerge, but the more undifferentiated the emotion, the more intense it would be. It would make sense that morbid emotions would also arise from high-intensity emotions. Previously, the author attempted to interpret the atypical symptoms of depression, such as oneiroid experience[23] and the experience of smelling oneself,[24] as substitutes for what Miyamoto described as a latent, subtle, mixed state.

Miyamoto stated, "After reexamining the seemingly old-fashioned concept of mixing in this way, it appears to be pregnant with the potential to contribute to understanding the current psychopathology of manic-depressive illness." Now, 30 years later, the trends in the psychiatric community seem to be moving away from Miyamoto's view. However, even though depression is said to have become less severe in recent years, if we consider his statement, "it is in the mild state rather than the severe state that the upward and downward fluctuations in mood become more pronounced and mixed phenomena become more apparent,"[12] then the mixed state may indeed have the potential to contribute to research today.

AUTHOR CONTRIBUTION

Toshiyuki Kobayashi is the only author of thie review.

CONFLICT OF INTEREST

The author declares no conflict of interest.

ETHICS APPROVAL STATEMENT

The ethics approval statement is not applicable.

PATIENT CONSENT STATEMENT

The patient consent statement is not applicable.

CLINICAL TRIAL REGISTRATION

The clinical trial registration is not applicable.

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How to cite this article: Kobayashi T. The significance of mixed states in mania and depression: from the psychopathological viewpoint of Tadao Miyamoto. Psychiatry Clin Neurosci Rep. 2022;1:e53. https://doi.org/10.1002/pcn5.53