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How Well Does the DSM-5 Capture Schizoaffective Disorder?

Dans quelle mesure le DSM-5 saisit-il bien le trouble schizoaffectif?

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Abstract
Schizoaffective disorder has long been recognized and quite variably defined. It has been variably positioned as a discrete entity, a variant of either schizophrenia or of a mood disorder, as simply reflecting the co-occurrence of schizophrenia and a mood disorder, and effectively reflecting a diagnosis along a continuum linking schizophrenia and bipolar disorder. This article considers historical views, some empirical data that advance consideration of its status, and focuses on its classification in the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (DSM-5). DSM-5 criteria seemingly weight it in the direction of a schizophrenic illness, as do some empirical studies, whereas the empirical literature examining the response to lithium links it more closely to bipolar disorder. It is suggested that DSM-5's B and C criteria are operationally unfeasible. Some suggestions are provided for a simpler definition.

Abrégé
Le trouble schizoaffectif est reconnu depuis longtemps et a été défini de façon très variable. Il a été présenté soit comme une entité discrète, une variante de la schizophrénie ou d'un trouble de l'humeur, un simple reflet de la co-occurrence de la schizophrénie et d'un trouble de l'humeur, et un reflet véritable d'un diagnostic sur un continuum reliant schizophrénie et trouble bipolaire. Le présent article tient compte des perspectives historiques, de certaines données empiriques qui en examinent le statut, et met l'accent sur sa classification dans le manuel DSM-5. Les critères du DSM-5 le placent apparemment dans la direction d'une maladie schizophrène, comme le font cetaines études empiriques, alors que la littérature empirique qui examine la réponse au lithium le relie plus étroitement au trouble bipolaire. Il est suggéré que les critères B et C du DSM-5 soient irréalisables sur le plan opérationnel. Des suggestions sont offertes pour une définition plus simple.

Keywords
schizoaffective disorder, DSM-5, psychiatric classification

Kasanin[1] introduced the term *schizoaffective psychosis*, although he acknowledged that his profile of patients corresponded to a pattern described earlier by Bleuler, while Marneros[2] observed that Kraepelin also noted a subgroup of patients that shared features of schizophrenia and manic depressive illness and that Schneider had also described "cases-in-between" in the 1930s. Kasanin's profile of his 9 patients was of "fairly young individuals, quite well integrated socially, who suddenly blow up in a dramatic psychosis."[1(p99)] Abrams et al.[3] noted that, as observed by Winokur et al.,[4] although more than 24 differing definitions of schizoaffective disorder had been subsequently generated, it was Spitzer at al.[5] who made one of the first attempts to differentiate it (actually both schizoaffective mania and schizoaffective depression) from psychotic mood disorders. Their definition required the co-occurrence of psychotic and mood symptoms as well as the persistence of psychotic symptoms for at least 1 week after the absence of prominent mood symptoms. Abrams et al.[3] noted how the first edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) as well as the DSM-II positioned schizoaffective disorder as a subtype of schizophrenia, while the DSM-III

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separated it from schizophrenia and assigned it as a category of "psychotic disorder not otherwise classified," but with neither editions offering specific diagnostic criteria.

As detailed by Malaspina et al.,[6] the DSM-III-R was the first DSM edition to provide operationalized diagnostic criteria. Criterion A defined it as a disturbance with, at some time, there being either a major depressive or manic syndrome concurrent with symptoms meeting criterion A for schizophrenia. Criterion B required psychotic features to be present for at least 2 weeks during an episode of the psychosis but no prominent mood symptoms. Criterion C required schizophrenia to be ruled out, and Criterion D required any organic cause to be excluded. The DSM-IV had a similar criteria set but allowed a mixed episode in addition to there being only a major depressive or manic episode.

A critique is now provided of the first 3 DSM-5 criteria for schizoaffective disorder. Criterion A requires having an "uninterrupted period of illness," during which there is either an episode of major depression or of mania concurrent with meeting DSM-5 criterion A for schizophrenia (and with the latter able to be met not only by psychotic symptoms but also by negative symptoms, such as diminished emotional expression or avolition). As it is common for those with clear-cut schizophrenia to have depressive symptoms during episodes, a diagnosis of a schizoaffective illness is not necessarily salient in such instances. A superior criterion A might simply allow that, during illness episodes, the patient demonstrates psychotic symptoms (e.g., grandiosity) common to both schizophrenia and bipolar mania or bipolar psychotic depression and with such symptoms specified.

Criterion B requires that delusions or hallucinations be present for 2 weeks or more in the absence of a depressive or manic episode during the lifetime period of the illness, with the manual suggesting that this criterion separates schizoaffective disorder from a major depressive or manic episode. This appears unfeasible in operation, as few psychotic patients would be able to remember and provide such information at any cross-sectional assessment, while the few clinicians who manage such patients over the lifetime of their illness would be able to remember such lifetime nuances. Criterion C requires that symptoms of a "major mood episode are present for the *majority* of the total duration of the active and residual portions of the illness," and, if not (such as symptoms present for only a "relatively brief period"), then the "diagnosis is schizophrenia." The DSM states that if an individual did not have such symptoms for more than 1 year during a 4-year psychotic illness, then the patient would not met criterion C. Apart from 1 year in a 4-year period not being a "majority" time interval, determining such a criterion again appears clinically unfeasible. In essence, the first 3 criteria appear opaque and fail to offer pristine defining features, while criteria B and C are operationally unfeasible.

Such limitations risk perpetuating the ineffable status of the condition. I now illustrate this point by briefly overviewing its hypothesized status and representative research findings.

Three principal categorical models have been formulated, with the condition either being viewed as (1) reflecting the co-occurrence of schizophrenia and a mood disorder, (2) being a variant of schizophrenia or of a mood disorder with psychotic symptoms persisting in between mood episodes, or (3) existing as a discrete entity. Additional dimensional models, by contrast, assume a continuum, either between schizophrenia and bipolar disorder or along several neurobehavioral functional dimensions. Resolution of the optimal model has not been achieved, largely as a consequence of the "condition" being variably defined.

Lacking a firm definition contributes to quite varying estimates of its incidence, although DSM-5 quantifies its lifetime risk at 0.3% and thus one-third as common as schizophrenia. Again, presumably as a consequence of its varying definitions, its diagnostic test-retest reliability has been shown to be distinctly lower than for schizophrenia and bipolar disorder.[7] Temporal instability may also be an issue, with Schwartz et al.[8] studying patients at 6-month and 24-month follow-up periods after hospital assessment and quantifying diagnostic agreement across the time periods as 92% for schizophrenia, 83% for bipolar disorder, and 36% for schizoaffective disorder, although such data may again reflect variation in observer ratings and not just symptom instability.

Numerous phenomenological studies have sought to resolve the diagnostic conundrum, and with several representative studies now overviewed. Pope et al.[9] compared 3 groups of patients: those with schizoaffective disorder, manic type, and those with mania or schizophrenia. They found no differences between their schizoaffective and manic patients but distinct differences between the schizoaffective and schizophrenic patients. They judged that such findings argued against schizoaffective disorder (manic type) being a valid independent diagnostic entity and that it should be classified as a manic disorder. By contrast, Pini et al.[10] evaluated patients with DSM-III-R diagnoses of schizophrenia, schizoaffective disorder, mood-incongruent psychotic mania, and mood-incongruent psychotic mixed mania. They reported that they found no differences in the rates of specific types of delusions and hallucinations between the groups apart from the manic patients being more likely to report grandiose delusions than those with schizophrenia, although "negative" schizophrenia symptom scores in the schizoaffective sample were closer to scores of those with schizophrenia than those with a manic episode. Shenton et al.[11] examined thought disorder in schizoaffective-manic, schizoaffective-depressed, and schizophrenic patients and judged that the thinking patters of the schizoaffective patients were similar to those with schizophrenia and concluded that schizoaffective disorder showed "a close resemblance to the schizophrenias."[p29] In an international, multisite study employing DSM-IV-TR diagnoses, Tondo et al.[12] studied 14,345 patients with a psychotic bipolar I disorder, 463 with schizophrenia, and 371 with a schizoaffective disorder, principally assessing sociodemographic and

clinical factors, and judged that the schizoaffective patients were "intermediate"(p40) between the 2 other groups on most study variables and thus effectively viewed the condition as "mid-way"(p41) along a continuum between schizophrenia and bipolar disorder and thus "not consistent with the recent DSM-5 inclusion"(p40) of schizoaffective disorder among the schizophrenia-like disorders. Thus, such studies show 3 contrasting patterns: a closer alignment of schizoaffective disorder to bipolar disorder than to schizophrenia, the converse pattern, and its having intermediate status.

Similarly, longitudinal outcome studies (reviewed by Abrams et al.[3]) variably indicate a pattern (1) akin to schizophrenia, (2) akin to mood disorders, or (3) superior to schizophrenia but worse than a mood disorder.

Do temporal changes in diagnosis inform us about any alignment of schizoaffective disorder to schizophrenia or to affective disorders? Santelmann et al.[13] undertook a meta-analysis of "rediagnosis studies" and quantified that, of those with an initial diagnosis of a schizoaffective disorder, 19% received a later diagnosis of schizophrenia and 14% of an affective disorder, while of those with a later diagnosis of a schizoaffective disorder, a larger proportion had been initially diagnosed with an affective disorder than schizophrenia (24% vs. 18%). They concluded that there was a slightly greater trend for those with a schizoaffective diagnosis to receive a later or earlier diagnosis of schizophrenia than an affective disorder, although their converse prospective and retrospective data suggest that any such diagnostic alignment is marginal. Genetic studies fail to indicate an alignment to either schizophrenia or bipolar disorder, with Malaspina et al.[6] reviewing studies indicating a comparable risk of the condition in those with family histories of schizophrenia or of bipolar disorder.

Lithium is generally regarded as a first-line mood stabilizer for those with a bipolar disorder and rarely beneficial for those with schizophrenia. Thus, the response to lithium by those with a schizoaffective disorder could clarify the disorder's status. Goodnick and Meltzer[14] reviewed studies indicating that lithium was effective in the initial treatment of those with schizoaffective mania and that its prophylactic use could reduce the frequency and duration of relapse in both schizoaffective manic and schizoaffective depressed patients. In an open study, Baethge et al.[15] quantified lithium (along with carbamazepine) as being highly effective maintenance treatments for those with a schizoaffective disorder. The suggested responsiveness to lithium is perhaps the most informative marker of schizoaffective disorder's status, in suggesting that it is diagnostically more closely linked to bipolar disorder than to schizophrenia.

Is the diagnosis useful clinically? First, if recorded, it informs all future managing clinicians that the diagnosis is in doubt and therefore should be reviewed to determine if clarification (as to the greater probability of schizophrenia or a bipolar disorder) is possible over time. Second, if made and the patient has only ever received antipsychotic medication, then there is a clear case (supported from one of the few relatively consistent findings in the literature) that a mood stabilizer (and especially lithium) be trialed. In those instances in which the patient shows a distinct response, it remains unclear whether the patient truly has a bipolar disorder (albeit atypical) or whether there is a subset of those with true schizoaffective illnesses who respond to lithium.

How might future DSM manuals handle the definition of the condition? I would argue for the removal of criteria B and C because of their lack of feasibility compromising valid assessment. Criterion A might be modified to state that the patient has (1) psychotic symptoms (i.e., delusion and/or hallucinations) that may be experienced by both those with schizophrenia and bipolar disorder (e.g., grandiosity) and (2) other illness correlates that are recognized as occurring in each condition (e.g., pressured speech, flight of ideas, excitability), and with all such features specified. The diagnosis would therefore weight state features rather than illness course ones.

Such diagnostic criteria weighting phenomenological features would allow an appropriate suite of studies comparing those meeting such criteria with those having clear-cut schizophrenic and bipolar illnesses to be compared on family history, measurable longitudinal history, and response to medication (especially mood stabilizers) variables.

Conclusion

As a diagnosis, schizoaffective disorder has long held ineffable territory, being quite variably defined and with studies seeking to pursue its prevalence, diagnostic status, and causes consequently limited. It is argued here that there are important clinical grounds for maintaining such a diagnosis but that current DSM-5 criteria have distinct limitations, both theoretically and in terms of their practicality, and some suggestions are provided for its more simpler definition and undertaking of clarifying application studies.

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References

1. Kasanin J. The acute schizoaffective psychoses. Am J Psychiatry. 1933;13:97-126.
2. Marneros A. The schizoaffective phenomenon: the state of the art. Acta Psych Scandinavica. 2003;108(suppl 418):29-33.

3. Abrams DJ, Rojas DC, Arciniegas DB. Is schizoaffective disorder a distinct categorical diagnosis? A critical review of the literature. Neuropsychiatr Dis Treat. 2008;4(6): 1089-1109.
4. Winokur G, Monahan P, Coryell W, et al. Schizophrenia and affective disorder—distinct entities or continuum? An analysis based on a prospective 6-year follow-up. Compr Psychiatry. 1996;37(2):77-87.
5. Spitzer RL, Endicott J, Robins E. Research diagnostic criteria: rationale and reliability. Arch Gen Psychiatry, 1978;35(6): 773-782.
6. Malaspina D, Owen MJ, Heckers S, et al. Schizoaffective disorder in the DSM-5. Schizophr Res. 2013;150(1):21-25.
7. Santelmann H, Franklin J, Bubhoff J, et al. Test-retest reliability of schizoaffective disorder compared with schizophrenia, bipolar disorder, and unipolar depression—a systematic review and meta-analysis. Bipolar Disord. 2015;17(7):753-768.
8. Schwartz JE, Fennig S, Tanenberg-Karant M, et al. Congruence of diagnoses 2 years after a first-admission diagnosis of psychosis. Arch Gen Psychiatry. 2000;57(6):593-600.
9. Pope HG, Lipinski JF, Cohen BM, et al. "Schizoaffective disorder": an invalid diagnosis? A comparison of schizoaffective disorder, schizophrenia, and affective disorder. Am J Psychiatry. 1980;137(8):921-927.
10. Pini S, de Queiroz V, Dell'Osso L, et al. Cross-sectional similarities and differences between schizophrenia, schizoaffective disorder and mania or mixed mania with mood-incongruent psychotic features. Eur Psychiatry. 2004;19(1):8-14.
11. Shenton M, Soloway MR, Holzman P. Comparative studies of thought disorders. II. Schizoaffective disorder. Arch Gen Psychiatry. 1987;44(1):21-30.
12. Tondo L, Vásquez GH, Baethge C, et al. Comparison of psychotic bipolar disorder, schizoaffective disorder, and schizophrenia: an international, multisite study. Acta Psychiatr Scand. 2016;133(1):34-43.
13. Santelmann H, Franklin J, Bubhoff J, et al. Diagnostic shift in patients diagnosed with schizoaffective disorder: a systematic review and meta-analyses of rediagnosis studies. Bipolar Disord. 2016;18(3):233-246.
14. Goodnick PJ, Meltzer HY. Treatment of schizoaffective disorders. Schizophr Bull. 1984;10(1):30-48.
15. Baethge C, Gruschka P, Berghöfer A, et al. Prophylaxis of schizoaffective disorder with lithium or carbamazepine: outcome after long-term follow-up. J Affect Disord. 2004;79(1-3):43-50.