



Letter to the Editor

A plea for a transdiagnostic conceptualization of negative symptoms and for consistent psychiatric vocabulary



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1. The ghost of Kraepelin

When the first author worked in the early 1990s as a student helper in a psychiatric facility, it was regarded as almost diagnostic malpractice to describe any symptoms of a patient with schizophrenia – then called a schizophrenic – as depressive. Following the Kraepelinian dichotomy of dementia praecox/schizophrenia versus manic-depressive illness or depression (Kraepelin, 1899), which was still predominant at that time, many clinicians felt they had to decide between the two. Clearly, the entity schizoaffective illness already existed, but such a diagnosis was rejected by many as *wishy-washy*.

To date, we now know that schizophrenia and depression are not counterexclusive and that there is evidence for a shared genetic vulnerability for schizophrenia, schizoaffective bipolar disorder, and major depression (Cardno and Owen, 2014; Wray et al., 2018). Moreover, there is convincing evidence for a wide range of common etiological factors, including environmental (e.g., van Nierop et al., 2015), biological (e.g., Grace, 2016), and psychological causes (e.g., Mitchell and Young, 2016).

Meta-analyses (Buckley et al., 2009) confirm that depressive symptoms requiring treatment are present in approximately 50% of patients with schizophrenia. The – in our view historically rooted – sustained underappreciation of depression is troublesome as patients diagnosed with schizophrenia struggle more time with depressive symptoms than with positive symptoms (an der Heiden et al., 2005). Of note, some transdiagnostic conceptualizations were developed in the past, but they received little weight. Bleuler (1950, originally published in 1911), who coined the term *schizophrenias*, noticed that depressive symptoms were common in patients with schizophrenia and might even be part of the illness (1911, p. 219). Similarly, Kay and Sevy (1990) put forward a dimensional model for schizophrenia in which negative, positive, and depressive features constituted the divergent points of a triangle.

2. Some depressive symptoms are not called depressive symptoms in patients with psychosis – Why is that?

In the context of schizophrenia, depressive symptoms usually mean *productive* features such as depressive mood, feelings of worthlessness,

feelings of guilt, and suicidality (Häfner et al., 2013; Müller and Wetzel, 1998). The reverse picture, that is, a reduction in affective signs such as poverty of speech, lack of drive, and social withdrawal, is also frequently observed in schizophrenia (Bottlender et al., 2003) but would usually not be called *depressive* although such symptoms are also common and well-described in patients with depression (e.g., American Psychiatric Association, 2013). In schizophrenia, the label “negative symptoms” is reserved for these symptoms. Clearly, some studies acknowledge that negative symptoms may not be specific to schizophrenia (Donnoli et al., 2011), but the vast majority of articles as well as scales – most prominently the Scale for the Assessment of Negative Symptoms (SANS), the Brief Negative Symptom Scale (BNSS), and the Clinical Assessment Interview for Negative Symptoms (CAINS) – narrowly restrict the relevance of this syndrome to patients with schizophrenia, suggestive of some specificity. Factor analyses of these scales reveal two second-order factors underlying negative symptoms: (a) “diminished expression” and (b) “amotivation” (Marder and Galderisi, 2017). It is still unclear whether these dimensions are found to a similar degree in patients with affective disorders.

3. Why are negative symptoms presented as if they are almost exclusive to schizophrenia?

There is a new trend to leave the beaten tracks of categorical nosology and to assess symptoms dimensionally and beyond diagnostic boundaries (Cuthbert, 2014; Kotov et al., 2017). Van Os (2009) tried to characterize affective and nonaffective psychoses in one model with several dimensions (e.g., positive symptoms, negative symptoms, and depression). Yet, some syndromes such as negative symptoms are still used as if they are specific to schizophrenia. We do not pretend to know for sure why this is the case, but we hope to provide some explanations and also ways to overcome this *schism* (in the correct sense of the prefix *schizo*). For one possible reason, we have to revert to Kraepelin. To denote the minus (negative) symptoms of schizophrenia as depressive would have meant a break with the concept of Kraepelin (1899), which few dared in the past (however, see Crow, 1995). So, by calling social withdrawal, lack of drive, etc., negative symptoms, prominent patient features were now measurable and at the same time a clash with the “Kraepelinians” was avoided. This diagnostic mingling with affective disorders was not obvious because the same phenomena carried different labels. To illustrate, the DSM-5 definition of anhedonia (a label mainly used for schizophrenia), which is described as a “decreased ability to experience pleasure” (American Psychiatric Association, 2013, p. 88), is very close to the depressive symptom of a “markedly diminished ... pleasure in all ... activities” (American Psychiatric Association, 2013, p. 160). This also applies to lack of drive, a term typically used in relation to depression (which would be called avolition in schizophrenia), social withdrawal (asociality in schizophrenia), and poverty of speech (alogia in schizophrenia).

We have just completed a study (Meiseberg, 2018) showing that when a clinical picture is framed as belonging to someone with *depression*, clinicians typically pick depressive terms such as lack of drive to describe the symptomatology. When the very same case is framed as *schizophrenia*, the endorsement of terms typical of schizophrenia such as avolition significantly rises. This trend to allocate negative symptoms to schizophrenia is aided by the narrow scope of most depression scales. Again, the minus (or negative) features of depression are well-described in the literature. Yet, most depression scales fail to measure them. For example, constricted emotional expression, social withdrawal, and poverty of speech are not part of the content of the Hamilton Depression Rating Scale. The PHQ-9 contains depression-minus symptoms but mingles them with productive features (“Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual”). Thus, we need more research on the diverse phenomenological aspects of depressive symptoms in affective disorders.

4. Symptom labels need to be revised

We feel it is high time to clean up and sharpen the vocabulary of psychiatry and clinical psychology, which is plagued by too many synonyms (e.g., positive, plus, productive syndrome) as well as terms that carry the same name or label but have different meanings to different professions (e.g., vigilance means alertness to many physicians but sustained attention to many neuropsychologists; short-term memory is defined quite differently by physicians and psychologists). Typical labels denoting negative symptoms such as avolition, alogia, and asociality (the latter two terms are confused by students and even some clinicians as problems with logical thinking and antisocial behavioral) should be replaced by more descriptive terms, which would help to augment their status as transdiagnostic.

Studying the negative features in both types of disorders, schizophrenia and affective disorders, will help uncover their potential differential prevalence as well as their complex underlying mechanisms. While many negative symptoms may be primary, some are likely secondary due to antipsychotic medication (for example, “flat affect” due to akinesia; see below), positive symptoms (exhaustion and social withdrawal because of ideas of persecution or sustained voice-hearing), and psychosocial factors (hopelessness, boredom).

We would like to propose the following measures:

1. Transdiagnostic measurement of negative symptoms: So-called negative symptoms such as those measured by the CAINS and SANS should be investigated in both affective and psychotic disorders. To meet this aim, scales designed for schizophrenia patients should be adapted to other disorders. Depression scales, on the other hand, should be developed to also incorporate “negative symptoms” such as diminished emotional expression and diminished experience of emotions. It would be interesting to see whether the factor structure of negative symptoms also holds for affective disorders.
2. Consistent usage of descriptive labels: The literature should use labels more consistently and should favor descriptive terms over neologisms. Labels such as asociality and alogia are misleading. Symptoms such as blunted (flat) affect are misleading as well (in 1911, Bleuler already noted that the lack of emotional expression does not preclude a lively affect) but also stigmatize patients if their affect is not compromised, only its perceivable expression. The term should thus be replaced by “decrease in affective expression”.

If negative symptoms occur to a similar extent in affective disorders and perhaps represent a severe form of depression, a relabeling of depressive nosology should be considered. Productive depressive symptoms may be labeled depressive-plus symptoms, whereas classical

negative symptoms may be labeled depressive-minus symptoms. Research on these symptoms beyond narrow diagnostic boundaries may help to improve treatment of schizophrenia as patients with schizophrenia usually view the amelioration of core depressive and “negative” features as a higher treatment priority than the reduction of positive ones (Moritz et al., 2017). Despite some promising face-to-face (e.g., White et al., 2011) and online (e.g., Moritz et al., 2016) treatment approaches, the development of treatments for plus and minus depressive symptoms in non-affective psychosis is still in its infancy.

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