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The Self-Disorder Model of Schizophrenia

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Illustrated by Mufalo Mufalo



Schizophrenia is a severe psychiatric syndrome. The main symptom is psychosis, in which people lose the ability to tell what is real and what's not. As defined by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), schizophrenia has five characteristics: delusions, hallucinations, disorganized speech, disorganized behavior, and negative symptoms.

What does all this mean? Delusions are fixed, often bizarre beliefs that are not responsive to evidence. Hallucinations are sensory experiences without any corresponding external stimuli. Disorganized speech is verbal communication with associations and interruptions that do not make sense. Disorganized behavior appears irrational and lacks apparent purpose. Finally, negative symptoms are deficits in cognition, motivation, and affect. For example, some people with schizophrenia struggle to pay attention and have difficulty experiencing pleasure. Today, if someone experiences at least two of these features for at least six months and their ability to function declines, they are classified as having the disorder.

Recent findings suggest that schizophrenia's many diverse symptoms are likely associated with a range of neurobiological roots. However, based on cognitive science research and analysis of first-person accounts from people with schizophrenia, clinical psychologist Louis Sass and psychiatrist Josef Parnas have

proposed that central to the disorder is a disturbance of ipseity, the basic sense of being a cohesive subject of experience living in an organized world. This theory involves phenomenology; it has to do with the nature and structure of first-person conscious experience. According to Sass and Parnas, the delusions, hallucinations, cognitive-affective changes, and disorganization of schizophrenia are all rooted in three primary disturbances to the experience of selfhood: hyperreflexivity, diminished self-affectation, and disturbed grip. Hyperreflexivity refers to a heightened self-consciousness in which standard features of experience that usually happen in the background become the objects of awareness and are, as a result, felt alienated from the self. Diminished self-affectation involves a reduction in feelings of agency and presence, where one does not feel they are present in the world or can freely act within it. Disturbed "grip" or "hold" describes changes in the structure of perceptual experience. Sass argues schizophrenia's symptoms can be traced back to these alterations in the experience of selfhood. For example, thought insertion, a symptom in which one feels alien thoughts are being placed in their mind, might arise because of the profound detachment from one's subjective experiences specific to hyperreflexivity.

These theoretical ideas can help us understand the striking changes in self-experience recounted by many people with schizophrenia. Professor of Law, Psychology, and Psychiatry Elyn

Saks, who lives with schizophrenia, has explained her experience of the disorder as how “Consciousness gradually loses its coherence. ... The ‘me’ becomes a haze, and the solid center from which one experiences reality breaks up like a bad radio signal. There is no longer a sturdy vantage point from which to look out, take things in, assess what’s happening. No core holds things together.” Another patient diagnosed with schizophrenia-spectrum condition has written, “I have this heightened awareness that the contents of my mind are not bound to my own awareness anymore, but that I essentially leave a trail of myself. ... I am not in myself. I think, and then I can feel those thoughts being transported to others.” The same patient also has described the world during psychosis as “seeming somehow less perceptible.”

In 2006, Parnas operationalized the ipseity-disorder concept of schizophrenia to create the Examination of Anomalous Self-Experience (EASE) symptom checklist. This interview method allows psychologists and psychiatrists to quantitatively measure disordered experiences of self. EASE interviewers examine whether subjects show symptoms of self-disorder across five dimensions: abnormal cognition and stream of consciousness, changes in self-awareness, abnormal bodily experiences, demarcation and transitivity (the way one differentiates between oneself and others), and existential reorientation (unusual changes in metaphysical beliefs). The EASE checklist further breaks down these dimensions into 118 highly specific types of experiences that are characteristic of self-disorder. Examples include the sense of a barrier between oneself and the world, the sense one’s thoughts have taken on an acoustic quality, the feeling of annihilation when physically close to another person, the presence of unusual sensations in one’s limbs, and the brief sense of being at the center of the universe. Subjects are given scores out of five for each of the main EASE categories — for all, zero indicates no self-disorder, and five indicates a severe degree of it — and afterward, scores are summed. High scores on the EASE mean high levels of self-disorder.

For instance, studies have demonstrated that high-psychosis-risk teenagers’ scores on the EASE can predict whether they will develop a full-blown psychotic disorder

Quotes from interviewed patients display the depth of the EASE methodology. Parnas notes how during an interview, one patient reported that in an episode of psychosis, their body felt “as if it did not hang together.” Another claimed, “I constantly regard myself. Sometimes it is so pronounced that I can hardly follow what’s going on on TV. Even during a conversation with others, I observe myself to the point of having difficulty in grasping what my interlocutors are saying.” And from someone else, “My thinking is like an intersection of freeways, with a constant zoom! zoom! noise from the racing cars.”

A lot of evidence supports the reliability of the EASE. It repeatedly produces the same results under the same conditions. For one, it has been shown that different interviewers conducting the EASE rate people similarly across all its dimensions. Statistical analyses also show high internal consistency, indicating strong correlations among the many things it tests. Additional evidence supports the measure’s validity, as it measures what it is supposed to measure, and the concept it is supposed to measure is

legitimate. For instance, studies have demonstrated that high-psychosis-risk teenagers’ scores on the EASE can predict whether they will develop a full-blown psychotic disorder later. People who are biologically related to people with schizophrenia, which is genetic, have significantly higher scores on the EASE than those who aren’t. EASE scores correlate positively with the severity of all five schizophrenia symptoms but negatively with social functioning. Even further, symptoms of self-disorder are frequently found among patients with schizophrenia but not nearly as much in conditions like psychotic depression and bipolar disorder with psychotic features. All this suggests that self-disorders are real, and importantly, their presence is relatively unique to the schizophrenia spectrum.

The self-disorder model also makes sense in light of several new findings about schizophrenia’s neurocognitive underpinnings. For one, it has been shown that abnormal multisensory integration and organization, the combination of information from different sensory modalities like vision, hearing, and touch, is implicated in schizophrenia. Multisensory integration allows individuals to combine fragments of experience and make sense of the world and has been proven to be important to the development of normal self-experience. Given this, it is plausible individuals with schizophrenia could lose clarity of their self-consciousness. Furthermore, many studies have concluded that the symptoms of schizophrenia are associated with the overactivation of the brain’s Default Mode Network (DMN), a network activated during inner-directed activities such as mind-wandering, imagining, and self-reflecting. DMN activation is correlated with difficulty focusing on external tasks. Excessive self-consciousness is just what researchers would expect people with chronic DMN activation to experience. Using electrophysiological techniques, cognitive neuroscientists have also suggested schizophrenia is likely connected to abnormalities in the brain’s corollary discharge system. This mechanism helps individuals differentiate signals generated by the self from those originating outside the self. This finding, too, fits nicely with an understanding of schizophrenia as a self-disorder.

The implications of the ipseity-disorder framework are huge. First, it can guide research into the physiological and psychological underpinnings of schizophrenia if we can conclude that schizophrenia symptoms are at least partly related to disturbances in ipseity. In that case, we can get important clues about the origins of symptoms by investigating features of cognition associated with self-experience.

This model could also help clinicians detect schizophrenia early. In its beginning stages, schizophrenia often appears similar to other disorders, making it hard for health professionals to determine which patients will initially develop schizophrenia and which will not. By using measures like the EASE, designed to identify phenomena associated exclusively with the schizophrenia spectrum, clinicians may better identify people with symptoms of schizophrenia.

Finally, the work of Sass, Parnas, and their colleagues has the potential to be used in the creation of novel therapies to treat the disorder. Though no current treatments for schizophrenia have so far been based on the ipseity-disturbance model, it could be possible for researchers to design a psychotherapeutic approach intended to help individuals living with schizophrenia cope with their complicated experiences of selfhood. For these reasons, there is a proposal to include self-disorder as part of the criteria for schizophrenia in the next version of the DSM. Continuing to research the self-disorder model of schizophrenia could expand our knowledge of this condition and improve the lives of those