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BRIEF REPORT

The construct validity of the Inventory of Psychotic-Like Anomalous Self-Experiences (IPASE) as a measure of minimal self-disturbance: Preliminary data

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Aim: The Inventory of Psychotic-Like Anomalous Self-Experiences (IPASE) is a self-report measure of minimal self-disturbance. The aim of the current report was to assess the construct validity of the scale by examining its convergent validity with the gold-standard measure of minimal self-disturbance, the Examination of Anomalous Self-Experience (EASE), and its discriminant validity.

Method: The sample consisted of 46 participants (21 ultra-high risk for psychosis patients, 14 first episode psychosis patients, 11 healthy controls). Correlations between the clinical instruments were examined.

Results: The IPASE correlated strongly with general psychopathology and positive psychotic symptoms, moderately with negative symptoms, and weakly with manic symptoms. The strongest correlation (r = 0.92) was apparent between IPASE and EASE total scores.

Conclusion: These preliminary data indicate construct validity of the IPASE, demonstrating both convergent and discriminant validity. The IPASE may be suitable as a screener measure for minimal self-disturbance, but should not be used as a replacement to measure the construct of minimal self-disturbance, which requires considerable psychopathological sophistication.

KEYWORDS

phenomenology, prodrome, psychometrics, psychopathology, ultra-high risk

1 | INTRODUCTION

In recent years, there has been a revival of interest in the study of psychopathology. It has been argued that it is important to move beyond diagnostic manual-based listing of criteria in order to gain a more comprehensive and nuanced understanding of mental disorders (Nelson, Hartmann, & Parnas, 2018; Nieman, 2017; Parnas, 2011, 2012, 2015; Stanghellini & Broome, 2014). This revival of phenomenology may have an important role to play in the advancement of nosological, treatment and pathoaetiological research (Nelson & Hartmann, 2017; Parnas, 2011, 2014; Parnas, Sass, & Zahavi, 2013; Stanghellini & Broome, 2014; Stanghellini & Fiorillo, 2015). A prominent construct in this research program has been the concept of "self" and disturbed self-experience (Kyrios, Nelson, Ahern, Fuchs, & Parnas, 2015; Nelson, 2013). Of particular relevance to psychosis research has been disturbance of the "minimal" (*aka* "basic,"

"core") self, sometimes referred to as *ipseity* (Parnas & Henriksen, 2014; Sass & Parnas, 2003). The term "minimal self," widely discussed in philosophy of mind, phenomenology and neuroscience, refers to the pre-reflective and immediate consciousness of action, experience, and thought. Two nested concepts can be identified as constituting this aspect of selfhood: sense of ownership/mine-ness (I perceive my body, perceptions, and thoughts as mine) and sense of agency (I experience myself as the source of my actions and their consequences) (Gallagher, 2011). These are generally implicit or "given" aspect of a normal sense of minimal self and provide the foundation or background against which we engage with the world (Zahavi, 2003). Disturbance or instability of the minimal self can manifest in a variety of anomalous subjective experiences, such as: disturbed sense of ownership of moment-to-moment experience (eg, the sense that my thoughts or body parts are not my own); disturbed agency (eg, the sense of not being in full control of my actions); unstable "first-person" perspective, associated with states of depersonalization (eg, feeling as though I am watching myself from a distance or somehow alienated from my own body); difficulty forming a continuous and coherent identity (eg, feeling anonymous or without a stable perspective and identity over time). These experiences frequently result in perplexity, disorientation and difficulties with social functioning and understanding ("common sense"), and are profoundly distressing (Nelson et al., 2009). Disturbed self-experience can intensify and crystallize over time into full-blown positive and negative psychotic symptoms (Sass & Parnas, 2003).

The main measure of minimal self-disturbance is the Examination of Anomalous Self-Experience (EASE) (Parnas et al., 2005). Empirical findings using the EASE and EASE proxy scales indicate that minimal self-disturbance: characterizes schizophrenia spectrum disorders independent of presence or intensity of frank psychotic symptoms (ie, is present both in psychotic schizophrenia spectrum disorders and schizotypal disorder) (Handest & Parnas, 2005; Nordgaard & Parnas, 2014; Parnas et al., 2005); correlates moderately with clinical features of schizophrenia (positive symptoms, negative symptoms, perceptual disturbances, formal thought disorder) (Nordgaard & Parnas, 2014); is substantially more prominent in schizophrenia than in psychotic disorders outside the schizophrenia spectrum, such as bipolar disorder with psychosis (Haug, Lien et al., 2012; Nordgaard & Parnas, 2014; Parnas, Handest, Saebye, & Jansson, 2003); correlates moderately with prodromal symptoms in non-psychotic adolescents (Koren et al., 2013; Koren, Lacoua, Rothschild-Yakar, & Parnas, 2016; Raballo et al., 2016) and predicts future onset of schizophrenia spectrum disorders in non-psychotic clinical populations (Parnas et al., 2011) and in "ultra-high risk" (UHR) for psychosis patients (Nelson, Thompson, & Yung, 2012); increases in relation to schizophrenia symptom expression in a large genetic linkage sample (Raballo & Parnas, 2011; Raballo, Saebye, & Parnas, 2011); is related to suicidality (Haug, Melle et al., 2012; Skodlar & Parnas, 2010; Skodlar, Tomori, & Parnas, 2008), poor functioning (Haug et al., 2014; Raballo et al., 2016) and longer duration of untreated psychosis (Haug et al., 2015) in schizophrenia. Together, this body of research indicates that minimal self-disturbance is a specific trait feature of schizophrenia spectrum disorders and is present in the prodromal phase of these disorders (Nelson, Parnas, & Sass, 2014; Nelson & Raballo, 2015; Parnas, 2011, 2012; Parnas, Bovet, & Zahavi, 2002; Parnas & Henriksen, 2014; Sass & Parnas, 2003). In the clinical context, measures of minimal self-disturbance may therefore function as powerful diagnostic and predictive tools (Nordgaard & Henriksen, 2016; Parnas, 2012; Raballo et al., 2016).

While providing a comprehensive assessment of minimal self-disturbance, the EASE is a resource-intensive instrument (in terms of length and training required). In some clinical or research situations, it may not be feasible to conduct a full EASE interview. A shorter or more pragmatic option is appealing, particularly if minimal self-disturbance might not otherwise be screened for or assessed at all. Given that empirical studies underline the potential diagnostic and prognostic value of the construct, it is important to include it in assessment schedules. In these situations, the shorter (self-report) Inventory of Psychotic-Like Anomalous Self-Experiences (IPASE) (Cicero, Neis, Klaunig, & Trask, 2016) may present an alternative option or an initial screening possibility. However, the construct validity of the IPASE, that is, how accurately it assesses minimal self-disturbance, has not yet been established. Use of the IPASE to date indicates: invariance in scores between sexes; positive correlations with psychotic-like experiences and self-consciousness and negative correlations with self-report and task measures of self-concept clarity and self-esteem; higher scores in participants with positive schizotypy compared to negative schizotypy and comparison groups; higher scores in patients with schizophrenia compared to healthy controls (Cicero, 2016). Minimal self-disturbance, measured using the IPASE, has also been found to mediate (along with cognitive biases) the relationship between traumatic life events and psychotic-like experiences (Gaweda et al., 2017; Gaweda et al., 2018). The EASE and the IPASE were developed using quite different methods: while the EASE was developed by phenomenological researchers based on theoretical constructs, extensive clinical experience and detailed qualitative investigation (Parnas et al., 2005), the IPASE was developed within the tradition of objective scale development (Clark & Watson, 1995) in which an overinclusive item-pool was developed and items were retained or excluded based on their performance on exploratory and confirmatory factor analyses.

The purpose of the current report is to provide a preliminary examination of the construct validity of the IPASE. This is achieved by examining its convergent validity in relation to the gold-standard EASE instrument and its discriminant validity by examining its relationship with a theoretically unrelated construct (in this case, a mania scale).

2 | METHODS

2.1 | Sample

A total of 46 participants were recruited between 2016 and 2017 from the Orygen Youth Health Clinical Program, a youth mental health service in northwestern Melbourne. Participants consisted of 21 ultra-high risk (UHR) for psychosis participants and 14 first episode psychosis (FEP) participants. Eleven healthy control participants were recruited within the same age range as the patient groups (15-25 years). UHR and FEP status was assessed using standard

operationalized criteria (see Nelson et al., 2017 for full details). Participants were assessed with the EASE and the IPASE as part of a larger study examining the relationship between minimal self-disturbance and neurocognitive and neurophysiological variables in early psychosis.

2.2 | Measures

The *Examination of Anomalous Self-Experience* [EASE (Parnas et al., 2005)] is an interview-based symptom checklist for semi-structured, phenomenological exploration of subjective anomalies that indicate disturbance of the minimal self. The instrument consists of five domains (Cognition; Self-awareness and Presence; Bodily Experiences; Demarcation; Existential Reorientation). Items can be scored both dichotomously (present/absent) or continuously using a 5-point severity/frequency scale. The *Inventory of Psychotic-Like Anomalous Self-Experiences* [IPASE (Cicero et al., 2016)] is a 57-item self-report scale in which participants indicate how much they agree with statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree). It contains sub-scales of Self-Awareness and Presence, Consciousness, Somatization, Cognition and Demarcation/Transitivism. The instrument has been found to have high internal reliability ($\alpha = 0.97$). The *Comprehensive Assessment of At Risk Mental States* [CAARMS (Yung et al., 2005)] is a semi-structured interview which assesses a variety of symptoms associated with the prodromal phase of psychosis, and which is used to operationalize the UHR criteria. The *Brief Psychiatric Rating Scale* [BPRS (Overall & Gorham, 1962)] is a widely-used scale that rates various domains of psychopathology. The *Scale for Assessment of Negative Symptoms* [SANS (Andreasen, 1983)] is an interviewer-rated scale for assessing negative psychotic symptoms.

2.3 | Analysis

The EASE continuous scoring method was used. Positive psychotic symptoms were measured by summing the positive symptom scores on the CAARMS, as per previous research (Hartmann et al., 2016). The relationship between the measures was analysed using Pearson correlation. The total score of the IPASE was used for correlations with the EASE and other clinical measures. Correlations between the IPASE sub-scales and EASE domains were also examined. A principal components analysis was also performed to inspect the relationship between the scales.

TABLE 1 Means (SD) of IPASE and EASE scores by total sample and sub-groups

	IPASE	EASE
Total sample	128.57 (SD = 58.02)	52.52 (SD = 45.24)
FEP	176.50 (SD = 42.00)	86.71 (SD = 30.30)
UHR	125.90 (SD = 53.86)	53.86 (SD = 44.72)
HC	72.64 (SD = 19.55)	6.45 (SD = 6.31)

FEP, first episode psychosis; HC, healthy controls; UHR, ultra-high risk for psychosis. The EASE scores are based on the continuous scoring method.

TABLE 2 Correlations between the IPASE and clinical measures

	EASE total	CAARMS positive symptoms scale	BPRS total	SANS total	CAARMS mania scale
IPASE total	0.924**	0.739**	0.695**	0.471*	0.30

*$P < 0.01$; **$P < 0.001$, .

3 | RESULTS

The mean age of the sample was 20.07 years (SD = 2.97 years) and consisted of 15 males/31 females. The means (SDs) of total EASE and IPASE scores are presented in Table 1. Table 2 shows the correlations between the clinical variables. The IPASE correlated moderately with negative symptoms (SANS), strongly with general psychopathology (BPRS) and positive psychotic symptoms (CAARMS positive symptoms scale), and weakly with manic symptoms (CAARMS mania scale). The strongest correlation ($r = 0.92$) was apparent between the IPASE and the EASE total score. The analysis was repeated with healthy controls excluded, yielding an equally high correlation between the IPASE and the EASE ($r = 0.91$) and a low negative correlation between the IPASE and the CAARMS mania scale ($r = -0.17$). See Figures 1 and 2 for scatterplots of the relationship between the IPASE and these two variables. Figure 3 is a plot from a principal components analysis of all measures with healthy controls excluded, showing a close relationship between the EASE and IPASE scores, with both clearly distinct from other clinical scales, particularly the CAARMS mania scale.

Correlations between the EASE domains and the IPASE sub-scales are presented in Table 3 (full sample). EASE domains 1 to 3 showed strong correlations with each of the IPASE sub-scales, with domains 4 and 5 showing moderate correlations with the IPASE sub-scales. Again, these correlations remained very similar when healthy controls were excluded (data not shown).

4 | DISCUSSION

The findings show a very high correlation between the IPASE and the EASE, stronger than that observed between the IPASE and other

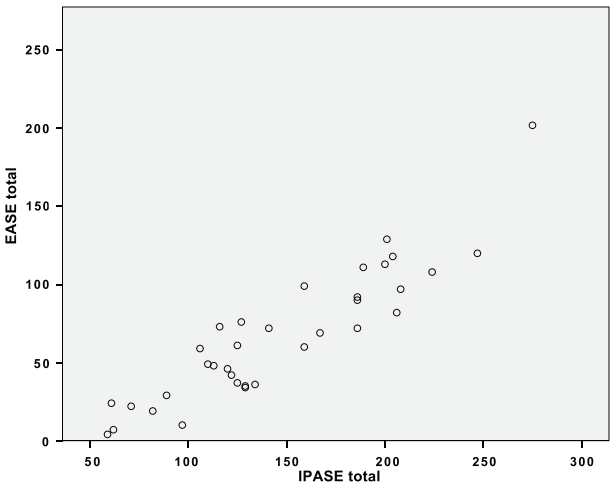

FIGURE 1 Scatterplot of the relationship between the IPASE and EASE total scores

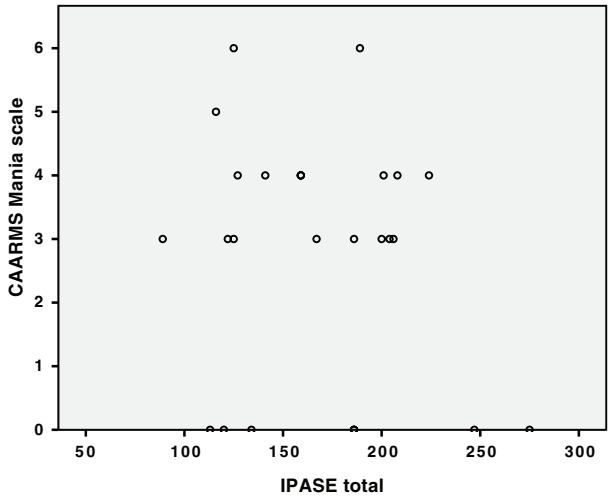

FIGURE 2 Scatterplot of the relationship between the IPASE total score and the CAARMS mania scale

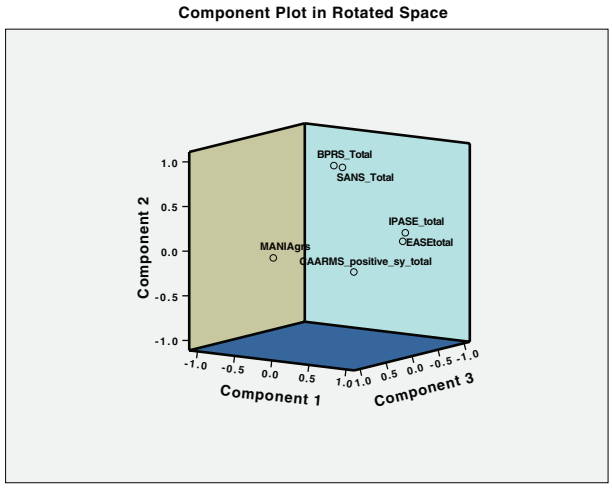

FIGURE 3 Plot in rotated space from a principal components analysis of the scales

symptom scales, and a weak, non-significant correlation with manic symptoms, a theoretically unrelated construct. This pattern of findings was also apparent in a principal components analysis of the scales. Together, these findings indicate construct validity of the IPASE scale, demonstrating both convergent and discriminant validity. However, the findings should be treated as preliminary given the clear limitations of the study, most notably the small sample size, particularly when broken down into UHR, FEP and healthy control participants, and the sample's uneven gender balance. However, if confirmed in larger samples, these preliminary findings may indicate that the IPASE could be used as a measure of minimal self-disturbance in contexts where it is not feasible to conduct a full EASE interview. This may include assessment-heavy studies, such as large intervention trials, or possibly as a screener instrument for more comprehensive assessment of anomalous subjective experiences using the EASE and the Examination of Anomalous World Experience (EAWE) (Sass, Pienkos, Skodlar et al., 2017), in a similar fashion to how psychotic symptom screening instruments such as the Prodromal Questionnaire (Savill, D'Ambrosio, Cannon, & Loewy, 2018) are used to identify cases who may warrant a more thorough assessment of attenuated psychotic symptoms (Nelson et al., 2017).

The IPASE cannot and should not replace the EASE as a thorough exploration and assessment of minimal self-disturbance. Minimal self-disturbance is a complex phenomenon suited to semi-structured interviewer-based phenomenological exploration requiring extensive training (Parnas, Nordgaard, & Henriksen, 2017). Minimal self-disturbance is often thought of as an overall Gestalt or structural shift in subjective experience, and these structural considerations (the parts-whole relationship) cannot be detected using a self-report measure such as the IPASE. The questions of trait vs state features can also not be disentangled without detailed in-person assessment. Equally, there may be important qualitative differences between items rated positively on the IPASE and the EASE, given the inability with the IPASE to explore context, interpretation of items and relationship with other symptoms/experiences (Nelson et al., 2018; Parnas et al., 2017). This qualitative difference between self-report and comprehensive interviewer-based assessment has been observed, for example, in the case of auditory verbal hallucinations (Stanghellini, Langer, Ambrosini, & Cangas, 2012).

Nevertheless, despite these important limitations and caveats, the current preliminary data do suggest the potential utility of the IPASE in some clinical and research contexts (Kendler, 2017) for screening for or assessing minimal self-disturbance.

TABLE 3 Correlations between the EASE domains and the IPASE sub-scales

	IPASE Cognition scale	IPASE Self-awareness and presence scale	IPASE Consciousness scale	IPASE Somatization scale	IPASE Demarcation/ Transitivism
EASE domain 1: Cognition and Stream of Consciousness	0.797**	0.896**	0.926**	0.898**	0.806**
EASE domain 2: Self-awareness and Presence	0.782**	0.878**	0.789**	0.825**	0.813**
EASE domain 3: Bodily Experiences	0.673**	0.784**	0.747**	0.810**	0.744**
EASE domain 4: Demarcation/Transitivism	0.480*	0.469*	0.526*	0.544*	0.554**
EASE domain 5: Existential Reorientation	0.586**	0.567**	0.514*	0.546*	0.698**

*$P < 0.01$; **$P < 0.001$.

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REFERENCES

Andreasen, N. C. (1983). *The scale for the assessment of negative symptoms (SANS)*. Iowa City, IA: The University of Iowa.

Cicero, D. C. (2016). Measurement invariance of the Schizotypal Personality Questionnaire in Asian, Pacific Islander, White, and multiethnic populations. *Psychological Assessment*, *28*(4), 351–361. https://doi.org/10.1037/pas0000180

Cicero, D. C., Neis, A. M., Klaunig, M. J., & Trask, C. L. (2016). The Inventory of Psychotic-Like Anomalous Self-Experiences (IPASE): Development and validation. *Psychological Assessment*, *29*, 13–25. https://doi.org/10.1037/pas0000304

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, *7*, 309–319.

Gallagher, S. (Ed.). (2011). *The Oxford Handbook of the Self*. Oxford: Oxford University Press.

Gaweda, L., Pionke, R., Krezolek, M., Prochwicz, K., Klosowska, J., Frydecka, D., … Nelson, B. (2018). Self-disturbances, cognitive biases and insecure attachment as mechanisms of the relationship between traumatic life events and psychotic-like experiences in non-clinical adults - A path analysis. *Psychiatry Research*, *259*, 571–578. https://doi.org/10.1016/j.psychres.2017.11.009

Gaweda, L., Prochwicz, K., Adamczyk, P., Frydecka, D., Misiak, B., Kotowicz, K., … Nelson, B. (2017). The role of self-disturbances and cognitive biases in the relationship between traumatic life events and psychosis proneness in a non-clinical sample. *Schizophrenia Research*, *193*, 218–224. https://doi.org/10.1016/j.schres.2017.07.023

Handest, P., & Parnas, J. (2005). Clinical characteristics of first-admitted patients with ICD-10 schizotypal disorder. *The British Journal of Psychiatry. Supplement*, *48*, s49–s54.

Hartmann, J. A., Yuen, H. P., McGorry, P. D., Yung, A. R., Lin, A., Wood, S. J., … Nelson, B. (2016). Declining transition rates to psychotic disorder in "ultra-high risk" clients: Investigation of a dilution effect. *Schizophrenia Research*, *170*(1), 130–136. https://doi.org/10.1016/j.schres.2015.11.026

Haug, E., Lien, L., Raballo, A., Bratlien, U., Oie, M., Andreassen, O. A., … Moller, P. (2012). Selective aggregation of self-disorders in first-treatment DSM-IV schizophrenia spectrum disorders. *The Journal of Nervous and Mental Disease*, *200*(7), 632–636. https://doi.org/10.1097/NMD.0b013e31825bfd6f

Haug, E., Melle, I., Andreassen, O. A., Raballo, A., Bratlien, U., Oie, M., … Moller, P. (2012). The association between anomalous self-experience and suicidality in first-episode schizophrenia seems mediated by depression. *Comprehensive Psychiatry*, *53*(5), 456–460. https://doi.org/10.1016/j.comppsych.2011.07.005

Haug, E., Oie, M., Andreassen, O. A., Bratlien, U., Nelson, B., Melle, I., & Moller, P. (2015). High levels of anomalous self-experience are associated with longer duration of untreated psychosis. *Early Intervention in Psychiatry*, *11*, 133–138. https://doi.org/10.1111/eip.12220

Haug, E., Oie, M., Andreassen, O. A., Bratlien, U., Raballo, A., Nelson, B., … Melle, I. (2014). Anomalous self-experiences contribute independently to social dysfunction in the early phases of schizophrenia and psychotic bipolar disorder. *Comprehensive Psychiatry*, *55*(3), 475–482. https://doi.org/10.1016/j.comppsych.2013.11.010

Kendler, K. S. (2017). Introduction to 'The ontology and epistemology of symptoms: The case of auditory verbal hallucinations in schizophrenia'. In K. S. Kendler & J. Parnas (Eds.), *Philosophical issues in psychiatry IV: Classification of psychiatric illness* (pp. 197–200). Oxford: Oxford University Press.

Koren, D., Lacoua, L., Rothschild-Yakar, L., & Parnas, J. (2016). Disturbances of the basic self and prodromal symptoms among young adolescents from the community: A pilot population-based study. *Schizophrenia Bulletin*, *42*, 1216–1224 *In press*.

Koren, D., Reznik, N., Adres, M., Scheyer, R., Apter, A., Steinberg, T., & Parnas, J. (2013). Disturbances of basic self and prodromal symptoms among non-psychotic help-seeking adolescents. *Psychological Medicine*, *43*(7), 1365–1376. https://doi.org/10.1017/S0033291712002322

Kyrios, M., Nelson, B., Ahern, C., Fuchs, T., & Parnas, J. (2015). The self in psychopathology. *Psychopathology*, *48*(5), 275–277. https://doi.org/10.1159/000438876

Nelson, B. (2013). Varieties of self-disturbance: A prism through which to view mental disorder. *Early Intervention in Psychiatry*, *7*, 231–234.

Nelson, B., Amminger, G. P., Yuen, H. P., Wallis, N., M, J. K., Dixon, L., … McGorry, P. D. (2017). Staged treatment in early psychosis: A sequential multiple assignment randomised trial of interventions for ultra high risk of psychosis patients. *Early Intervention in Psychiatry*, *12*, 292–306. https://doi.org/10.1111/eip.12459

Nelson, B., & Hartmann, J. A. (2017). Prediction in mental health research and its limits (or why life can only be understood backwards but must be lived forwards). *Early Intervention in Psychiatry*. https://doi.org/10.1111/eip.12530

Nelson, B., Hartmann, J. A., & Parnas, J. (2018). Detail, dynamics and depth: Useful correctives for some current research trends. *The British Journal of Psychiatry*, *212*, 262–264.

Nelson, B., Parnas, J., & Sass, L. A. (2014). Disturbance of minimal self (ipseity) in schizophrenia: Clarification and current status. *Schizophrenia Bulletin*, *40*(3), 479–482.

Nelson, B., & Raballo, A. (2015). Basic self-disturbance in the schizophrenia spectrum: Taking stock and moving forward. *Psychopathology*, *48*(5), 301–309. https://doi.org/10.1159/000437211

Nelson, B., Sass, L. A., Thompson, A., Yung, A. R., Francey, S. M., Amminger, G. P., & McGorry, P. D. (2009). Does disturbance of self underlie social cognition deficits in schizophrenia and other psychotic disorders? *Early Intervention in Psychiatry*, *3*(2), 83–93. https://doi.org/10.1111/j.1751-7893.2009.00112.x

Nelson, B., Thompson, A., & Yung, A. R. (2012). Basic self-disturbance predicts psychosis onset in the ultra high risk for psychosis "prodromal" population. *Schizophrenia Bulletin*, *38*(6), 1277–1287. https://doi.org/10.1093/schbul/sbs007

Nieman, D. (2017). *Prevention in mental health care: Time for a new approach*. New York, NY: Routledge.

Nordgaard, J., & Henriksen, M. G. (2016). Self-disorders: A promising candidate for early detection. *Scandinavian Journal of Child and Adolescent Psychiatry and Psychology*, *4*(1), 12–13.

Nordgaard, J., & Parnas, J. (2014). Self-disorders and the schizophrenia spectrum: A study of 100 first hospital admissions. *Schizophrenia Bulletin*, *40*(6), 1300–1307. https://doi.org/10.1093/schbul/sbt239

Overall, J., & Gorham, D. (1962). The brief psychiatric rating scale. *Psychological Reports*, *10*, 799–812.

Parnas, J. (2011). A disappearing heritage: the clinical core of schizophrenia. *Schizophrenia Bulletin*, *37*(6), 1121–1130. https://doi.org/10.1093/schbul/sbr081

Parnas, J. (2012). The core gestalt of schizophrenia. *World Psychiatry: Official Journal of the World Psychiatric Association*, *11*(2), 67–69.

Parnas, J. (2014). The RDoC program: Psychiatry without psyche? *World Psychiatry*, *13*(1), 46–47. https://doi.org/10.1002/wps.20101

Parnas, J. (2015). Differential diagnosis and current polythetic classification. *World Psychiatry*, *14*(3), 284–287. https://doi.org/10.1002/wps.20239

Parnas, J., Bovet, P., & Zahavi, D. (2002). Schizophrenic autism: Clinical phenomenology and pathogenetic implications. *World Psychiatry*, *1*(3), 131–136.

Parnas, J., Handest, P., Saebye, D., & Jansson, L. (2003). Anomalies of subjective experience in schizophrenia and psychotic bipolar illness. *Acta Psychiatrica Scandinavica*, *108*(2), 126–133 doi:105 [pii].

Parnas, J., & Henriksen, M. G. (2014). Disordered self in the schizophrenia spectrum: A clinical and research perspective. *Harvard Review of Psychiatry*, *22*(5), 251–265.

Parnas, J., Moller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., & Zahavi, D. (2005). EASE: Examination of Anomalous Self-Experience. *Psychopathology*, *38*(5), 236–258. https://doi.org/10.1159/000088441

Parnas, J., Nordgaard, J., & Henriksen, M. G. (2017). Panic, self-disorder, and EASE research: Methodological considerations. *Psychopathology*, *50*(2), 169–170. https://doi.org/10.1159/000471505

Parnas, J., Raballo, A., Handest, P., Jansson, L., Vollmer-Larsen, A., & Saebye, D. (2011). Self-experience in the early phases of schizophrenia: 5-year follow-up of the Copenhagen Prodromal Study. *World Psychiatry*, *10*(3), 200–204.

Parnas, J., Sass, L. A., & Zahavi, D. (2013). Rediscovering psychopathology: The epistemology and phenomenology of the psychiatric object. *Schizophrenia Bulletin*, *39*(2), 270–277. https://doi.org/10.1093/schbul/sbs153

Raballo, A., Pappagallo, E., Dell' Erba, A., Lo Cascio, N., Patane, M., Gebhardt, E., … Fiori Nastro, P. (2016). Self-disorders and clinical high risk for psychosis: An empirical study in help-seeking youth attending community mental health facilities. *Schizophrenia Bulletin*, *42*, 926–932. https://doi.org/10.1093/schbul/sbv223

Raballo, A., & Parnas, J. (2011). The silent side of the spectrum: Schizotypy and the schizotaxic self. *Schizophrenia Bulletin*, *37*(5), 1017–1026. https://doi.org/10.1093/schbul/sbq008

Raballo, A., Saebye, D., & Parnas, J. (2011). Looking at the schizophrenia spectrum through the prism of self-disorders: an empirical study. *Schizophrenia Bulletin*, *37*(2), 344–351. https://doi.org/10.1093/schbul/sbp056

Sass, L. A., & Parnas, J. (2003). Schizophrenia, consciousness, and the self. *Schizophrenia Bulletin*, *29*(3), 427–444.

Sass, L., Pienkos, E., Skodlar, B., Stanghellini, G., Fuchs, T., Parnas, J., & Jones (2017). N. EAWE: Examination of Anomalous World Experience. *Psychopathology*, *50*, 10–54.

Savill, M., D'Ambrosio, J., Cannon, T. D., & Loewy, R. L. (2018). Psychosis risk screening in different populations using the prodromal questionnaire: A systematic review. *Early Intervention in Psychiatry*, *12*(1), 3–14. https://doi.org/10.1111/eip.12446

Skodlar, B., & Parnas, J. (2010). Self-disorder and subjective dimensions of suicidality in schizophrenia. *Comprehensive Psychiatry*, *51*(4), 363–366. https://doi.org/10.1016/j.comppsych.2009.11.004

Skodlar, B., Tomori, M., & Parnas, J. (2008). Subjective experience and suicidal ideation in schizophrenia. *Comprehensive Psychiatry*, *49*(5), 482–488. https://doi.org/10.1016/j.comppsych.2008.02.008

Stanghellini, G., & Broome, M. R. (2014). Psychopathology as the basic science of psychiatry. *The British Journal of Psychiatry*, *205*(3), 169–170. https://doi.org/10.1192/bjp.bp.113.138974

Stanghellini, G., & Fiorillo, A. (2015). Five reasons for teaching psychopathology. *World Psychiatry*, *14*(1), 107–108. https://doi.org/10.1002/wps.20200

Stanghellini, G., Langer, A. I., Ambrosini, A., & Cangas, A. J. (2012). Quality of hallucinatory experiences: Differences between a clinical and a non-clinical sample. *World Psychiatry*, *11*(2), 110–113.

Yung, A. R., Yuen, H. P., McGorry, P. D., Phillips, L. J., Kelly, D., Dell'Olio, M., … Buckby, J. (2005). Mapping the onset of psychosis: The comprehensive assessment of at-risk mental states. *The Australian and New Zealand Journal of Psychiatry*, *39*(11–12), 964–971. https://doi.org/10.1111/j.1440-1614.2005.01714.x

Zahavi, D. (2003). Phenomenology of self. In T. Kircher & A. David (Eds.), *The self in neuroscience and psychiatry* (pp. 56–75). Cambridge: Cambridge University Press.

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