Schizophrenia Bulletin vol. 40 no. 6 pp. 1300–1307, 2014
doi:10.1093/schbul/sbt239
Advance Access publication January 29, 2014

Self-disorders and the Schizophrenia Spectrum: A Study of 100 First Hospital Admissions

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Introduction: **Self-disorders (SD) have been described as a core feature of schizophrenia both in classical and recent psychopathological literature. However, the specificity of SD for the schizophrenia spectrum disorders has never been demonstrated in a diagnostically heterogeneous sample, nor has the concurrent validity of SD been examined.** ***Aim:*** **(1) To examine the specificity of Examination of Anomalous Self-Experiences (EASE) measured SD to the schizophrenia spectrum disorder in first contact inpatients, (2) to explore the internal consistency and factorial structure of the EASE, (3) to assess the concurrent validity of SD by exploring correlations between SD and the canonical psychopathological dimensions of schizophrenia, (4) to explore relations of SD to intelligence, sociodemographic, and extrinsic illness characteristics.** ***Methods*****: A total of 100 consecutive first admission patients underwent a comprehensive psychopathological examination and an assessment of SD with the EASE scale. The diagnostic distribution of the EASE scores was tested with ANOVA, whereas the relations between the EASE scores and other symptomatic dimensions of schizophrenia were tested with Spearman's rho. A potential factorial structure and the internal consistency of the EASE scale were also examined.** ***Results*****: SD aggregated significantly in the schizophrenia spectrum disorders, with no differences between schizophrenia and schizotypal disorders. EASE scores correlated moderately with canonical psychopathological dimensions of schizophrenia. Factor analysis of the EASE disclosed only one factor and the internal consistency of the EASE was excellent.** ***Conclusions*****: SD aggregate selectively in the schizophrenia spectrum disorders, with similar levels in schizophrenia and schizotypy. The study lends validity to the view of SD as an experiential vulnerability phenotype of the schizophrenia spectrum disorders.**

Keywords: schizophrenia/self-disorders/schizophrenia spectrum disorder/EASE/validity

Introduction

The notion of a disordered self in schizophrenia as its core phenotypic feature was articulated, in various terms and clarity in all classic texts on schizophrenia (Kraepelin, Bleuler, Minkowski, Berze, Gruhle, Jaspers, Kronfeld) and in the more recent, phenomenologically oriented literature.[1–3] For example, Kraepelin[4] considered "disunity of consciousness" as a generative disorder in schizophrenia, whereas Eugen Bleuler[5] listed the experiential disorders of the ego among the so-called "complex fundamental" (diagnostic) schizophrenic symptom. Jaspers[6] observed that in schizophrenia, "*Descartes' 'cogito ergo sum' (I think therefore I am) may still be superficially cogitated but it is no longer a valid experience*" (p. 122; our italics). Kurt Schneider[3] explicitly emphasized that the formative matrix out of which the "first rank symptoms" emerge, was a "*radical qualitative change*" in the field of consciousness, comprising a disturbed first personal perspective ("Ichheit") and a disturbed sense of "mineness" of experience ("Meinhaftigkeit").[7] The notion of an experiential self-disorder (SD) continued to appear in the literature in schizophrenia, predominantly as anecdotal case reports in phenomenologically or psychoanalytically oriented literature or in influential theoretical contributions.[8] However, a disorder of the self, understood as a set of anomalous experiences, is not included in the contemporary diagnostic systems (DSM-III+/ICD-10) nor was it addressed, until recently, by systematic empirical research.

The notion of an experiential SD was revived by 2 independent, in-depth, qualitative clinical investigations of first admission schizophrenia spectrum patients in Denmark[9] ($N = 19$) and Norway[10] ($N = 21$). These qualitative reports stimulated systematic empirical research, using ad hoc rational scales, which comprised the items believed to reflect the SD and constructed from the

available psychopathological data on different clinical and population samples (pre-EASE-SD-analog scales). This wave of studies demonstrated that SD aggregate selectively in first admission schizophrenia and schizotypal disorders,[11,12] but not in bipolar psychosis.[13] SD were also detectable in populations at high genetic risk for schizophrenia, aggregating selectively among individuals diagnosed with schizophrenia spectrum disorders who were biologically related to a schizophrenia proband.[14,15] In a follow-up of nonspectrum psychiatric patients, 5 years after their first admission, SD predicted new (incident) cases of the schizophrenia spectrum disorder.[16]

On the clinical-phenomenological level, SD refer to a disturbed structure of subjectivity, ie, a disturbed sense of the experiential self. This ordinary sense of self signifies living our (conscious) life in the first-person perspective, as a self-present, single, temporally persistent, bodily, and demarcated (bounded) subject of experience and action. Phenomenology and neuroscience operate here with the notions of "minimal" or "core" self to describe a structure of experience that necessarily must be in place in order for the experience to be subjective, ie, to be someone's experience.[17] The notion of "minimal self" signifies the first personal articulation of experience, typically called "mineness," "myness," "for-me-ness" or ipseity.[18] It is a sense of "I-me-myself" that implicitly saturates our experiences across their changing modalities and the flux of time. I am always already aware of "I-me-myself," with no need for introspection or reflection to assure myself of being myself. Thus, ipseity founds the very basic sense of identity core upon which more complex and sophisticated sense of identity and being a person emerge and are continuously (re)-created throughout the life. The minimal sense of self is always coupled with an automatic, unreflected immersion in the shared social world, variously designated, eg, "common sense,"[1] "sense of reality,"[6] "fonction du réel."[19] The world is always there, tacitly grasped as a real and self-evident background of all experience and meaning.

In schizophrenia spectrum disorders, this basic selfhood seems to be challenged, unstable and oscillating, resulting in often alarming and alienating experiences, frequently dating back to childhood or early adolescence. The patient feels ephemeral, lacking core identity, profoundly (yet ineffably) different from others ,and alienated from the social world. There is a diminished sense of existence, distortions of first-person perspective with a failing sense of "mineness" of the field of awareness (eg, "my thoughts have no respect for me," "it seems as if my thoughts were not mine"), spatialization of the experiential contents (eg, thoughts being experienced as located, extended, thing-like entities). and inadequate "ego-boundaries," with deficient sense of privacy of one's inner world. Correlatively, there is a sense of lacking immersion in the world and inadequate nonreflective (immediate) grasp of self-evident meanings (eg, "why is the grass green?"), as well as a general hyperreflective stance (eg, "I only live in my head," "I always observe myself").

Following the initial studies,[9,10] a scale for a systematic qualitative and quantitative, semistructured exploration of SD was constructed (Examination of Anomalous Self-Experiences; EASE).[12] The EASE construction, which involved senior interdisciplinary scholars from 3 European countries, was based on the empirical data from extensive, in-depth interviews with schizophrenia spectrum patients, a review of classic and contemporary German, French, and English language literature, and conceptual inputs from philosophy of mind and phenomenology.

The EASE consists of 57 items, exploring 5 overlapping domains, grouped into thematically (rationally) similar sections of the scale: (1) stream of consciousness (experience of cognition and emotion), (2) sense of presence/basic identity, (3) bodily experience, (4) sense of demarcation ("ego boundaries"), (5) existential reorientation (eg, finding a new meaning in life, etc.) and solipsistic experiences. The EASE has been shown by 3 independent groups to possess good to excellent interrater reliability among trained interviewers.[20–22]

The purpose of the present study was 4-fold: (1) to examine the specificity of EASE-measured SD to the schizophrenia spectrum disorder (schizophrenia, other "non-organic," nonaffective psychosis, and schizotypal disorder) in first contact psychiatric inpatients, (2) to explore the internal consistency and factorial structure of the EASE, (3) to assess aspects of the concurrent validity of SD by exploring correlations between SD and the canonical psychopathological dimensions of schizophrenia, ie, the positive and negative symptoms and formal thought disorder, (4) to explore relations of SD to intelligence (IQ), sociodemographic, and extrinsic illness characteristics (duration of untreated psychosis [DUP] and duration of untreated illness [DUI]).

In continuation with the earlier research which used the EASE analog scales, we expected to find a selective aggregation of the EASE-assessed SD in the schizophrenia spectrum conditions (schizophrenia, other nonaffective psychosis, and schizotypal disorders) as compared with mental disorders outside the spectrum. We also anticipated positive correlations with the canonical psychopathological dimensions of schizophrenia. Since we do not consider the single items of the EASE a series of mutually independent (autonomous) symptoms, but rather as phenomenological facets or aspects of an underlying Gestalt change of the structure of subjectivity,[12,18,23,24] we expected this hypothesis to be reflected in a monofactorial structure and high internal consistency of the EASE.

Methods

Patients

The sample comprised consecutive first admissions to the Psychiatric Center Hvidovre (a psychiatric facility of

the University of Copenhagen) that provides psychiatric service to a population of 150 000 in one particular catchment area of the City of Copenhagen (there are no private inpatient psychiatric facilities in Denmark). The department has a long psychopathological research tradition of adoption, high risk, linkage, and clinical studies in schizophrenia.[14,25–29]

The patients were included over a period of 18 months starting from June 2009, independently of their clinical diagnosis at admission. All consecutive first admissions were screened for eligibility. If there were more eligible patients than it was possible to examine within the pragmatic constraints of the project, the youngest patient was always selected. The patients participated on the condition of informed consent and a relevant Medical Ethical Committee approved the study.

The patients had to be considered as being capable of tolerating lengthy interviews because one of the study goals was the adequacy/efficacy of different psychodiagnostic interview approaches.[30] This requirement naturally excluded aggressive, agitated, and/or severely psychotic patients. The additional exclusion criteria comprised primary or clinically dominating alcohol/substance abuse, history of brain injury, mental retardation, organic brain disorder, and age >65 years. Due to ethical concerns, involuntarily admitted and legal patients (both categories representing a very important proportion of first-admitted inpatients) were also excluded.

Sixteen eligible patients declined to participate (clinical diagnoses: schizophrenia, $N = 4$; schizotypal disorder, $N = 1$; major depression, $N = 9$; anxiety, $N = 1$; and deferred diagnosis, $N = 1$). Six patients had to be excluded after the enrollment because, upon examination, they did not meet the inclusion criteria ($n = 3$), did not show up for the interview appointments ($n = 2$), or withdrew the consent after completing the data collection ($n = 1$). Thus, the final sample consisted of 34 men and 66 women (82% of those invited to participate). The sex distribution reflects the selection process, which tended to eliminate males.

Assessments and Diagnoses

The details of the diagnostic assessments are published elsewhere.[30] Briefly, all patients were interviewed with the SCID-I (Structured Clinical Interview for DSM-IV) and the Schizotypal Personality Disorder module from the SCID-II,[31] the OPCRIT scale,[32] expanded with the additional items from the SADS-L,[33] the BSABS (Bonner Skala Für die Beurteilung von Basissymptomen),[34] a checklist of the First Rank Symptom continua,[35] and a Mental Status Examination.[25–27] The OPCRIT scale (an extract of the Present State Examination) and the SADS-L (Schedule for Affective Disorder and Schizophrenia) are diagnostic instruments that target major dimensions of axis I psychopathology. The BSABS targets the so-called "basic symptoms" (varieties of experiential abnormalities). It contains a section with a detailed assessment of perceptual aberrations, which was included in the present diagnostic assessment.

After each interview, a polydiagnostic checklist was completed, comprising all symptoms and signs as well as other criteria of schizophrenia stipulated by the following diagnostic systems: the St Louis criteria,[36] the Research Diagnostic Criteria,[37] the Flexible System, narrow and wide,[38] the Vienna Research Criteria,[39] the DSM-IV, the ICD-8/9, and ICD-10.[40] The interviews were split over 2–3 sessions and the total duration of the interviews was 3–6 h. All interviews were videotaped.

The present study used the Best-Estimate Consensus Life-Time DSM-IV diagnosis. It was allocated to each patient by J.P. and J.N., who jointly reviewed all available, diagnostically relevant information (interview videos, notes, information from the hospital charts, which also contained second informant descriptions of the illness' symptoms and their evolution).

SD were assessed with the EASE interview, conducted by one of us (J.N.), an experienced psychiatrist with psychometric research experience,[41,42] and trained to expert level in the use and teaching of the EASE. For the purpose of the analysis, we looked only for the presence or absence (not severity or duration) of the EASE items and explored the latter as dimensions (ie, summing up the items rated as present). This was done to ensure comparability with previous and ongoing studies using the EASE and the analog, pre-EASE proxy instruments.[13,20,43–46] Operatively, we dichotomized the likert severity scores of the EASE counting 0 and 1 (absent or questionably present) as absent (ie, = 0), and 2, 3, and 4 (ie, mild, moderate, and severe) as present (ie, = 1).

Since we have not used the Positive and Negative Syndrome Scale (PANSS),[47] in order to obtain the measures of the canonical dimensions of schizophrenic symptomatology, we constructed relevant scales by adding nonoverlapping items selected from the interview schedule. Table 1 shows the composition and Cronbach's alphas of those scales in addition to a scale targeting perceptual disorders, derived from the BSABS.[34] The alphas could not be further improved by removing specific items, with the exception of the positive symptom scale (see table 1). However, we refrained form deleting the item "catatonia" because we judged that this deletion would only result in a negligible increase of the alpha.

IQ was assessed by a computerized test Intelligenz-Struktur-Test 2000 R[48] assessing verbal-, numerical- and figurative-spatial-IQ by 4 selected subtests: analogies, sentence completion, sequences of numbers, and matrices. We summarized the results from those subtests into a global IQ score, used for the data analyses.

Diagnostic Groups

We imposed the following hierarchy on the DSM-IV diagnoses: (1) schizophrenia, (2) other (nonaffective,

Table 1. Psychopathological Scales

Positive Symptoms Scale	Perceptual Disturbances
Thought insertion	Blurred vision
Thought withdrawal	Partial vision
Thought broadcasting	Transient blindness
Thoughts aloud (as though others could hear them)	Visual perceptual disturbances
Delusions	Disruptions in the assessment of an object's distance and size
Bizarre delusions	
Third person auditory hallucinations	Abnormally long persistent optical irritation
Auditory hallucinations: running comment on the subjects' behavior/thoughts	Hyperacusis
	Changes in hearing
Persistent hallucinations in any modality occurring everyday for weeks	Abnormal sustained sound impression
	Perceptual changes: olfactorial
Catatonia (excitement, posturing, waxy flexibility, negativism, mutism, stupor)[a]	Perceptual changes: taste
	Disturbance in the perception of the importance of the observed
	Overwhelming sensory input
Cronbach's α = .656	Cronbach's α = .562
Formal Thought Disorder Scale	**Negative Symptom Scale**
Incoherence	Disturbance of volition, avolition, inertia
Semantic disturbances	Apathy
Derailment, loose associations	Social withdrawal
Tangentiality	Anergy
Illogical thinking	Alogia, poverty of speech
Rapport disturbed by formal thought disorder	
Cronbach's α = .709	Cronbach's α = .721

Note: [a]Alpha increases to .698 if catatonia is removed.

nonorganic) psychosis, (3) bipolar disorder, (4) major depression, (5) schizotypal personality disorder, (6) other diagnosis (eg, anxiety disorders, OCD, personality disorders other than the schizotypal). Thus, the schizotypal personality disorder was moved out of the axis II and placed hierarchically higher than both the nonpsychotic axis I disorders and all other-than-schizotypal personality disorder (SPD) axis II personality disorders. The high priority allocated to the SPD reflects the study's main focus on the schizophrenia spectrum disorders and ensures a conceptual continuity with our previous studies.

Analytic Strategy

For the purpose of analyses we compared 3 groups: (1) schizophrenia and other nonaffective psychosis (jointly called "nonaffective psychosis"), (2) schizotypal disorder, and (3) all other diagnoses combined. This grouping is identical with the grouping employed in the earlier studies on that issue.[12,14–16,24,49]

The analytic strategy was straightforward: in exploring the diagnostic distribution of the EASE scores, the diagnostic groups served as independent variable whereas the EASE scores constituted dependent variables, explored by ANOVA with polynomial (post hoc tests) analysis exploring between-group differences.

Potential relations between the EASE scores and sociodemographic variables were tested with the tests Mann-Whitney and Kruskal-Wallis. The psychopathological variables were explored by means of correlation analysis.

Internal consistency of the EASE scale was examined with Cronbach's alpha coefficient, whereas Varimax rotation in principal component analysis (PCA) was used to explore factorial structure of the EASE domains. All analyses were conducted with the SPSS Version 20.

Results

The sample characteristics and the distribution of the EASE scores across the 3 diagnostic groups are presented in table 2. The distribution of EASE scores was the same across the categories of age, gender, marital status, and years of education. All patients scored above 70 on the IQ test. No significant correlation was detected between the EASE scores and IQ.

SD aggregated significantly within the schizophrenia spectrum (schizophrenia, other nonaffective psychosis, and schizotypal disorders) as compared with the patients outside the spectrum. Schizophrenia/nonaffective psychosis and schizotypal disorder did not differ from each other on the levels of SD. A corresponding analysis of the 5 EASE domains (not shown in table 2) yielded nearly identical results: the schizophrenia spectrum patients scored higher than nonspectrum patients and no difference was found between the psychotic (ie, schizophrenia

Table 2. Descriptives of the Study Sample

	Sample		Nonaffective Psychosis		Schizotypal Disorder		Other Mental Illness		
	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range	Statistics, *P*
N	100		46		22		32		
Gender, F/M	66/34		29/17		18/4		19/13		$X^2 = 3.23$ ($P = .196$)
Age, years	27.7	18–60	26.5	18–59	25.0	19–47	31.22	18–60	Welch's $F = 3.37$ ($P = .042$)
Age at first symptom, years	19.5	4–60	16.2	4–42	18.5	6–25	24.9	4–60	Welch's $F = 3.53$ ($P = .037$)
Unmarried	52%		52%		64%		44%		$X^2 = 2.07$ ($P = .356$)
Educational level									
Primary school or less	40% ($N = 40$)		52.5% ($N = 21$)		20% ($N = 8$)		27.5% ($N = 11$)		
High school	37% ($N = 37$)		35% ($N = 13$)		22% ($N = 8$)		43% ($N = 16$)		
College	8% ($N = 8$)		37.5% ($N = 3$)		12.5% ($N = 1$)		50% ($N = 4$)		
Started university	9% ($N = 9$)		44.5% ($N = 4$)		44.5% ($N = 4$)		11% ($N = 1$)		
Finished university	6% ($N = 6$)		83% ($N = 5$)		17% ($N = 1$)		0% ($N = 0$)		
Unemployed at onset	20%		22%		9%		25%		$X^2 = 2.22$ ($P = .329$)
EASE total score[a]	15.53 (8.93)	1–37	19.63 (8.39)	4–37	17.82 (6.82)	5–33	8.06 (5.89)	1–24	Welch's $F = 29.74$ ($P = .000$)
Cronbach's α	.903								

Note: [a]Post hoc Scheffe nonaffective psychosis = schizotypal disorder > other mental illness.

and nonaffective psychosis patients) and the schizotypal patients.

The correlation between the EASE scores, canonical dimensions of schizophrenic symptomatology as well as DUP and DUI appear in table 3. The SD correlated positively with all canonical symptom scales, the highest correlations being with the negative symptoms and formal thought disorder as well as with the scale on perceptual disorders.

The EASE scale showed excellent internal consistency (Cronbach's alpha .903, calculated for the entire sample). The correlations between the EASE total and domain scores were moderate to high (range: 0.554–0.925). The PCA of the 5 EASE domains yielded a one-factor solution, accounting for 59.8% of the total variance (the PCA at the item level was prohibited by a too small sample size).

Discussion

We found no correlation between SD and IQ, which suggests that the ability to report anomalous self-experiences does not depend on the IQ level. SD correlated weakly to positive symptoms and moderately to negative symptom and to formal thought disorder scales, the latter two scales being usually considered to reflect relatively schizophrenia-specific dimensions of psychopathology.[50–53] These associations confer some measure of concurrent validity on the SD in the context of psychopathology of schizophrenia. The low correlation with the positive symptoms is not independent of the fact that SD exhibit equal levels in schizophrenia and schizotypal disorder (the latter group, by definition, not presenting fully articulated psychotic symptoms). SD also correlated to perceptual disorders, which have been shown in several studies to be characteristic of schizophrenia spectrum disorders.[11,54,55] We are inclined to consider some of the reported perceptual anomalies in schizophrenia (eg, disorders of perceptual perspective), measured by the BSABS,[34] to be less reflective of the putative disturbances in the perceptual functioning as such, but rather as reflecting a change of the structure of subjectivity, ie, the SD (ipseity-hyperreflexivity model).[18,56]

There were no significant correlations between the dimensions of psychopathology, including SD measured by the EASE, and the DUP (table 3). The canonical dimensions of schizophrenia psychopathology were likewise unrelated to the DUI. However, the association with DUI was significant for the SD. Early illness onset correlated with higher EASE scores. Although we did not have specific hypotheses concerning the DUP and DUI, this latter association may suggest that SD constitute an insidious component of the psychopathology of the schizophrenia spectrum, perhaps related to the neurodevelopmental nature of the symptomatic trajectory of the spectrum disorders.[57] A presence of this association is also quite consistent with our clinical experience, which

Table 3. Relations Between EASE and Other Psychopathological Dimensions, IQ, Duration of Untreated Psychosis, and Duration of Untreated Illness

	EASE Total	Positive Symptoms	Negative symptoms	Formal Thought Disorder	Perceptual Disturbances	IQ	DUP[a]	DUI
EASE total	—	0.299**	0.421**	0.442**	0.642**	0.008	−0.122	0.589**
Positive symptoms		—	0.377**	0.398**	0.253**	−0.210*	−0.457**	−0.209* (0.223)[b]
Negative symptoms			—	0.285**	0.200*	−0.009	−0.138	−0.346** (−0.130)[b]
Formal thought disorder				—	0.273**	−0.221*	−0.158	−0.313** (−0.144)[b]
Perceptual disturbances					—	−0.135	−0.192	−0.250* (−0.093)[b]
IQ						—	0.019	0.01
DUP							—	−0.102
DUI								—

Notes: Spearman's rho. DUI, duration of untreated illness; DUP, duration of untreated psychosis; IQ, intelligence.
[a]Only calculated for the part of the sample with psychotic symptoms ($N = 46$).
[b]The correlations between DUI and the psychopathological dimensions when calculated only for the part of the sample with psychotic symptoms are shown in parenthesis.
*Correlation is significant at the .05 level (2-tailed), **Correlation is significant at the .01 level (2-tailed).

suggests that the SD often emerge already in childhood or early adolescence.[58] The diagnostic findings of this study are consistent with earlier SD studies, which used the pre-EASE-SD-analog scales[12,14,49] and a pilot study that was a part of the process of the EASE construction.[15] All these studies agree in demonstrating that schizotypal disorder and schizophrenia do not differ from each other with respect to SD. A study by Haug et al[59] of nonconsecutive first admission patients with schizophrenia and bipolar psychosis found that the SD aggregate selectively among the patients with schizophrenia, replicating an earlier report on schizophrenia-bipolar differences in chronic patients, using a pre-EASE-SD-analog scale.[13] The difference in SD between schizophrenia and bipolar psychosis, observed by Haug et al,[59] remained significant after controlling for the differences between the groups on the symptomatic PANSS dimensions. Raballo and Parnas[14] (using a pre-EASE-SD-analog scale), studying a sample at high genetic (familial) risk for schizophrenia, demonstrated that individuals without a diagnosis of mental disorder, who nonetheless exhibited a few schizotypal features had significantly higher SD scores than healthy individuals entirely free of schizotypal traits. This latter study, combined with the presented results demonstrating similar levels of the SD in schizophrenia and in schizotypal disorder, suggest that SD reflect the phenotypic vulnerability dimension of the schizophrenia spectrum disorder.

Jointly, the present and earlier studies support the notion of SD as an experiential vulnerability phenotype specific to the schizophrenia spectrum disorders. These findings corroborate the classic clinical intuitions of the founders of the schizophrenia concept and are likewise consistent with the vulnerability model proposed by Meehl,[60] in which the schizotypal features are conceived of as the most elementary phenotypic vulnerability level, whereas the schizophrenic psychosis is an outcome of a further decompensation, due to additional genetic and environmental influences.

In other words, SD should not be considered as sequelae of psychosis. Rather they seem to reflect a more fundamental and generative layer of psychopathology.[58] Moreover, SD are detectable in disturbed nonpsychotic adolescents, correlating only weakly or moderately with the Structured Interview for Prodromal Syndromes measured[61,62] prodromal (subpsychotic) symptoms[63] (the correlations interpreted by the authors of that study as suggesting semi-independent pathogenetic processes operating in the onset of psychosis). Preliminary studies on small samples suggest that SD predict schizophrenia in the ultra-high-risk populations[21,64] and new (incident) schizophrenia spectrum cases at 5 years follow-up of patients initially diagnosed outside the spectrum.[16] From our theoretical perspective,[65] the individual SD (individual EASE items), should not be considered as atomic, mutually independent, well-delimited symptoms but rather as interdependent aspects of a shared Gestalt of a structural change of subjectivity (consciousness), namely the instability of first-person

perspective or ipseity.[18,23,66] A lack of a factorial structure, moderate to high intercorrelations between the experiential subdomains of the EASE, as well as a high internal consistency of the EASE scale, are not inconsistent with this hypothesis.

In sum, the present study lends support to the validity of EASE-measured SD as a specific experiential vulnerability feature of the schizophrenia spectrum disorders. Apart from the currently investigated clinical potential of SD for early detection and early differential diagnosis, SD merit attention as a potential target phenotype for neurobiological research[67] and may come to play a significant role in conceptualizing the neurodevelopmental processes implicated in the onset of schizophrenia, not only in purely biological terms but also complemented by a cognitive-psychological framework.[68]

Funding

Faculty of Health Sciences, University of Copenhagen (to J.N.).

Acknowledgments

The authors have declared that there are no conflicts of interest in relation to the subject of this study.

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