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# PATIENT-REPORTED ICD-11 PERSONALITY DISORDER SEVERITY AND DSM-5 LEVEL OF PERSONALITY FUNCTIONING

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This study evaluated the Standardized Assessment of Severity of Personality Disorder (SASPD) proposed for ICD-11 and the Level of Personality Functioning Scale-Brief Form 2.0 (LPFS-BF) developed for DSM-5 Section III and their relationships with external correlates. We used a clinical sample (N = 150; 33% women) of 65 psychiatric outpatients and 85 incarcerated addicts, who self-reported the SASPD and the LPFS-BF. We conducted correlation and regression analyses in order to determine the relative associations of these two measures with relevant external criteria. SASPD predominantly captured externalizing and other-related problems (e.g., potential harm to others), whereas LPFS-BF predominantly captured internalizing and self-related problems (e.g., identity and distress). Generally, LPFS-BF explained more variance of the external criteria relative to SASPD. The findings seem to reflect that the ICD-11 oriented SASPD emphasizes interpersonal and aggressive features, whereas the DSM-5oriented LPFS-BF emphasizes self-pathology and distress. More conclusive findings warrant interview-rated personality functioning.

*Keywords*: ICD-11 personality disorder severity, *DSM-5* level of personality functioning, LPFS, SASPD, schema modes, maladaptive schemas

It is well established that personality disorders (PD) comprise a high-volume, high-risk, and high-cost problem in the community (Tyrer et al., 2010). However, there is substantial variation in the degree of dysfunction that people with PD experience (Crawford, Koldobsky, Mulder, & Tyrer, 2011). This is an important issue, as research suggests that general PD severity predicts psychosocial impairment and various negative outcomes over and beyond PD type (Hopwood et al., 2011; Wright, Hopwood, Skodol, & Morey, 2016). For example, level of estimated severity predicts the magnitude of other mental disorders, unemployment, substance abuse, self-harm, and violence (Bastiaansen et al., 2013; Crawford et al., 2011; Hopwood et al., 2011). The current categorical classification systems in the *International Classification of Diseases*,

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10th edition (ICD-10) and the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (*DSM-5*) take no account of this variation, but the Alternative Model of Personality Disorders (AMPD) in *DSM-5* Section III (American Psychiatric Association [APA], 2013) as well as the proposed ICD-11 classification of PD (World Health Organization [WHO], 2017) diagnose PD¹ according to severity/impairment, which is the focus of the present article.

The proposed ICD-11 model instructs the user to select one of three different diagnostic codes according to PD severity: *mild*, *moderate*, or *severe* (in the chapter "Mental and Behavioral Disorders"), along with specification of five stylistic trait qualifiers (negative affectivity, detachment, dissociality, disinhibition, and anankastia). Additionally, there is also a code available for "personality difficulty" (in the chapter "Factors Influencing Health Status and Contact with Health Services"), which is below the threshold for a disorder. Virtually, there are five levels—"No impairment," "Difficulty," "Mild impairment," "Moderate impairment," and "Severe impairment"—of which only the last three are considered when diagnosing PD. Essentially, the proposed ICD-11 classification implies that "Severe personality disorder is usually associated with a past history and future expectation of severe harm to self or others" (WHO, 2017). In other words, this suggests that self-injury (as often seen in borderline PD) and interpersonal violence (as often seen in antisocial PD) are possible indicators of severe PD.

The AMPD model in *DSM-5* Section III instructs the user to select one of five different levels of impairment on the Level of Personality Functioning Scale: (0) none/little, (1) some, (2) moderate, (3) severe, and (4) extreme, along with specification of 25 stylistic trait facets organized in five domains (negative affectivity, detachment, antagonism, disinhibition, and psychoticism). The threshold for a PD diagnosis is (2) moderate impairment or more. In contrast to the ICD-11 classification of severity, the *DSM-5* model implies that "an individual with severe personality pathology has an impoverished, disorganized, and/or conflicted psychological world that includes a weak, unclear, and maladaptive self-concept; a propensity to negative, dysregulated emotions; and a deficient capacity for adaptive interpersonal functioning and social behavior" (APA, 2013, p. 771). In other words, the ICD-11 model explicitly emphasizes the risk of harm as a severity marker, whereas the *DSM-5* model highlights underlying features of impairment (e.g., self-concept, dysregulated emotions, and social cognition) with only implicit reference to potential physical consequences.<sup>2</sup>

There is not yet any "gold standard" for assessment of severity/impairment in the two diagnostic systems, and the ratings may be based on clinical observations, interview ratings, and/or material provided by informants. However, different structured/semi-structured interviews have been developed for operationalization of the LPFS including the Dutch Semi-structured Interview for Personality Functioning DSM-5 (STiP-5.1; Hutsebaut, Feenstra, & Kamphuis, 2016) the Danish Clinical Assessment of the Level of Personality







<sup>1.</sup> Which are further qualified by stylistic traits (Lotfi, Bach, Amini, & Simonsen, 2018).

<sup>2.</sup> Level 4 (extreme impairment) of self-functioning says: "Hatred and aggression may be dominant affects, although they may be disavowed and attributed to others" (APA, 2013, p. 778).



Functioning Scale (CALF; Thylstrup et al., 2016), and the Iranian Interview for DSM-5 Level of Personality Functioning (Amini, Pourshahbaz, Mohammadkhani, Khodaie Ardakani, & Lotfi, 2015). Recently, the APA published the Structured Interview for DSM-5 – Alternative Model of Personality Disorder (SCID-AMPD; First, Skodol, Bender, & Oldham, 2018), which includes a separate module for structured assessment of the LPFS impairment criteria (Bender, Skodol, First, & Oldham, 2018).

Nevertheless, the aforementioned instruments require sufficient resources in terms of necessary training, knowledge of personality pathology, and time for administration. While interview ratings are generally considered best practice, a more feasible self-report form does not require the additional expense of an interviewer to administer it. Moreover, in contrast to interview ratings, the self-report procedure is absolutely standardized and free from interviewer bias. One self-report measure has been developed for the current ICD-11 proposal, the Standardized Assessment of Severity of Personality Disorder (SASPD; Olajide et al., 2018). Likewise, different self-report measures have been developed for the DSM-5 model, including the 12-item Level of Personality Functioning Scale-Brief Form 2.0 (LPFS-BF; Bach & Hutsebaut, 2018) and the 80-item Level of Personality Functioning Scale-Self-Report (LPFS-SR; Morey, 2017). In the present study, we exclusively employed the SASPD for the proposed ICD-11 model and LPFS-BF for the DSM-5 model (see Measures). The SASPD and the LPFS-BF are essentially different in terms of their test construction. On the SASPD, respondents are presented with prompts about the impact of a particular problem on their social and interpersonal functioning (rather than explicitly asking respondents to which degree they experience a personalityrelated problem), as well as the potential impact of the problem on their risk of harm to self and others. For example, a severe rating of SASPD item 6 (i.e., worrying) says, "constant worrying stops me from doing things I need to do." In the LPFS-BF, respondents are simply asked to rate how much each statement (e.g., "I often think very negatively about myself") applies to them on a Likert scale (from "Very False or Often False" to "Very True or Often True"). Moreover, the SASPD Item 4 (Temper), Item 5 (Acting on impulse), and Item 8 (Caring about other people) involve externalizing features and potential harm towards others, which therefore applies to one-third of the items. In comparison, none of the LPFS-BF items contains explicit reference to potential harm towards self or others. Taken together, the two measures of PD severity/impairment seem to have significant commonalities but also essential differences.

# THE CURRENT STUDY

It is important to determine to what extent the proposed ICD-11 and *DSM-5* models have similar positions in the nomological network representing PD severity/impairment, and to delineate how the two models differ. The ability of SASPD and LPFS-BF to capture relevant external correlates may provide initial evidence of their utility for clinical and research purposes. We sought to examine this by investigating the associations of SASPD and LPFS-BF with relevant external criteria, including estimated PD severity indices, subjective well-being,









current/lifetime suicidality, maladaptive schemas, dysfunctional modes, and healthy functioning modes (see the Measures section for a comprehensive overview of the rationale for including schemas and modes). Moreover, potential discrepancy and alignment between the two models may be illuminated and potentially pave the way for future harmonization. Based on the aforementioned review of ICD-11 and *DSM-5* conceptualizations of PD severity/impairment, we hypothesized that the SASPD would predominantly capture external features of potentially harmful aggression, whereas the LPFS-BF would predominantly capture external features of maladaptive self-concept and distress.

#### **METHOD**

# PARTICIPANTS AND PROCEDURES

Participants (N = 150; 33% women;  $M_{\rm age} = 32.5$ , SD = 10.6) in the present study were consecutively recruited from their respective clinical settings (see below). Sociodemographics are reported in Table 1, and self-reported clinical characteristics are reported in Table 2.

Psychiatric outpatients (n = 65) were recruited from a psychiatric hospital unit specialized in treatment of personality disorders and emotional disorders. Each patient was initially evaluated by a psychiatrist or psychologist, and met the diagnostic criteria for at least one DSM-5 mental disorder with particularly high prevalence of Avoidant PD and Borderline PD along with co-occurring depressive disorders, anxiety disorders, and eating disorders. Patients suspected

**TABLE 1. Sociodemographics** 

		otal 3% females)		atients 7% females)	Prisoners $(n = 85; 100\% \text{ males})$		
Age (M; SD)	32.50	10.60	30.25	10.17	34.32	10.63	
In a relationship (n; %)	83	55.3%	42	64.6%	41	48.2%	
Single (n;%)	67	44.7	23	35.4%	44	51.8%	
Educational level (n; %)							
Basic education	74	59.3%	19	29.2%	55	64.7%	
Vocational school	34	22.7%	11	16.9%	23	27.1%	
High school	18	12.0%	17	26.2%	1	1.2%	
BA level or more	24	16%	18	27.7%	6	7.1%	
Employment status (n; %)							
Unemployed	64	42.7%	14	20%	51	60%	
Long-term sick leave	29	19.3%	21	32.3%	8	9.4%	
Disability pension	12	8.0%	1	1.5%	11	12.9%	
In public health care rehabilitation	5	3,4%	4	6.1%	1	1.2%	
Ordinary employmenta	40	26.7%	26	40%	14	16.5%	

<sup>&</sup>lt;sup>a</sup>Includes students, employees, and self-employed.







**TABLE 2. Scale Statistics and Clinical Characteristics** 

	To	tal	Outpa	atients	Priso	oners	_Subsample
	M	SD	М	SD	М	SD	diff. (d)
SASPD <sup>a</sup>	0.99	0.45	1.06	0.43	0.94	0.46	0.27
LPFS-BF 2.0 <sup>a</sup>	1.29	0.70	1.59	0.70	1.07	0.62	0.79*
WHO-5 Well-Being <sup>a</sup>	41.92	23.54	33.85	19.22	48.09	24.75	-0.65*
PSIa	1.14	0.73	1.41	0.80	0.94	0.60	0.67*
PID-5 Total (severity) <sup>a</sup>	0.99	0.47	1.06	0.48	0.94	0.46	0.26
Maladaptive Schema Domains							
YSQ DR <sup>b</sup>	2.87	1.09	3.05	1.11	2.56	1.00	0.47*
YSQ IAPb	2.79	1.11	3.07	1.15	2.33	0.87	0.73*
YSQ ERS <sup>b</sup>	3.27	1.05	3.42	1.08	3.01	0.96	0.40
YSQ IL <sup>b</sup>	2.93	1.00	3.02	1.03	2.78	0.94	0.24
Schema Modes							
SMI VC <sup>b</sup>	3.01	1.12	3.34	1.11	2.46	0.93	0.86*
SMI ACb	2.79	0.90	2.91	0.90	2.59	0.87	0.36
SMI ECb	1.94	0.94	1.95	0.90	1.94	1.02	0.01
SMI ICb	2.67	0.99	2.68	1.01	2.65	0.97	0.03
SMI UC <sup>b</sup>	3.10	1.06	3.34	1.07	2.72	0.93	0.62*
SMI HCb	3.12	1.00	2.83	1.00	3.59	0.83	-0.83*
SMI CSb	3.32	0.94	3.55	0.97	2.95	0.75	0.69*
SMI DPrb	2.73	1.04	2.93	1.06	2.42	0.95	0.51*
SMI DS <sup>b</sup>	3.29	1.05	3.43	1.05	3.06	1.03	0.36
SMI SA <sup>b</sup>	2.60	0.85	2.60	0.87	2.60	0.82	< 0.01
SMI BAb	2.20	0.83	2.14	0.83	2.29	0.83	-0.18
SMI PPb	2.61	0.98	2.78	1.01	2.33	0.87	0.48*
SMI DPb	3.53	1.12	3.78	1.11	3.12	1.01	0.62*
SMI HA <sup>b</sup>	3.63	0.85	3.39	0.79	4.03	0.81	-0.80*
Suicidality: Recent <sup>c</sup>	1.51	0.93	_	_	1.51	0.93	_
Suicidality: Lifetime <sup>c</sup>	2.02	1.27	_	_	2.02	1.27	_

Note. <sup>a</sup>n = 150; <sup>b</sup>n = 98; <sup>c</sup>n = 85 (only prisoners). *d* = Cohen's *d* effect size (minus indicates that patient score is lower than prisoner scores). SASPD = Standardized Assessment of Severity of Personality Disorder; LPFS-BF = Level of Personality Functioning Scale–Brief Form; WHO-5 Well-Being = World Health Organziation-5 Well-Being Index; PSI = Personality Severity Index; PID-5 = Personality Inventory for DSM-5; YSQ = Young Schema Questionnaire; SMI = Schema Mode Inventory; DR = Disconnection and Rejection; IAP = Impaired Autonomy and Performance; ERS = Excessive Responsibility and Standards; IL = Impaired Limits; VC = Vulnerable Child; AC = Angry Child; EC = Enraged Child; IC = Impulsive Child; UC = Undisciplined Child; HC = Happy/Content Child; CS = Compliant Surrenderer; DPr = Detached Protector; DS = Detached Self-Soother; SA = Self-Aggrandizor; BA = Bully and Attack; PP = Punitive Parent; DP = Demanding Parent; HA = Healthy Adult. \*Significant at the 0.05 level.







of having a current psychotic disorder, organic disorder, severe depression, autism spectrum disorder, or manic episode were not included. Detailed diagnostic characteristics for consecutively admitted patients in this clinical site are reported elsewhere (Bach & Fjeldsted, 2017).

Prisoners (n = 85) were recruited from a prison unit specialized in the treatment of personality disorder and substance/alcohol abuse. As reported in Table 3, this sample showed high scores on externalizing and antisocial

TABLE 3. Item-Level Descriptive Statistics for SASPD and LPFS-BF

	To	tal		Pati	ents		Priso	oners		
	М	SD	Min- Max	М	SD	Min- Max	М	SD	Min- Max	Subsample diff. (d)
SASPD										
1. Being with others	0.85	0.70	0-3	1.02	0.65	0-3	0.72	0.72	0-3	0.44*
2. Trusting other people	1.49	0.85	0-3	1.52	0.90	0-3	1.46	0.81	0-3	0.07
3. Friendships	1.15	0.97	0-3	1.35	0.91	0-3	0.99	0.98	0-2	0.38*
4. Temper	1.05	1.05	0-3	1.02	1.05	0-3	1.07	1.04	0-3	-0.05
5. Acting on impulse	1.15	0.96	0-3	0.97	0.90	0-3	1.28	0.98	0-3	-0.33*
6. Worrying	1.36	0.96	0-3	1.75	0.85	0-3	1.06	0.94	0-3	0.77*
7. Being organized	1.01	0.71	0-3	1.14	0.77	0-3	0.92	0.64	0-3	0.31
8. Caring about other people	0.35	0.71	0-3	0.17	0.45	0-2	0.49	0.83	0-3	-0.48*
9. Self-reliance	0.51	0.75	0–3	0.58	0.83	0–3	0.45	0.68	0–3	0.17
LPFS-BF										
1. I often do not know who I really am	1.11	1.17	0-3	1.49	1.19	0-3	0.82	1.08	0-3	0.59*
2. I often think very negatively about myself	1.61	1.15	0–3	2.20	1.02	0-3	1.16	1.03	0-3	1.02*
3. My emotions change without me having a grip on them	1.59	1.11	0-3	2.09	0.98	0-3	1.20	1.04	0-3	0.88*
4. I have no sense of where I want to go in my life	1.21	1.15	0-3	1.57	1.16	0-3	0.93	1.07	0-3	0.58*
5. I often do not understand my own thoughts and feelings	1.30	1.05	0-3	1.65	0.99	0–3	1.04	1.03	0-3	0.61*
6. I often make unrealistic demands on myself	1.39	1.16	0-3	1.83	1.13	0-3	1.05	1.08	0-3	0.71*
7. I often have difficulty understanding the thoughts and feelings of others	1.02	0.98	0-3	0.95	1.01	0-3	1.07	0.96	0-3	-0.12
8. I often find it hard to stand it when others have a different opinion	1.31	0.96	0-3	1.48	0.99	0-3	1.19	0.93	0-3	0.30
9. I often do not fully understand why my behavior has a certain effect on others	0.95	0.96	0-3	0.91	1.00	0-3	0.99	0.93	0–3	-0.08
10. My relationships and friendships never last long	0.95	1.04	0–3	1.22	1.10	0-3	0.74	0.95	0-3	0.47*
11. I often feel very vulnerable when relations become more personal	1.80	1.14	0–3	2.11	1.09	0–3	1.56	1.12	0–3	0.50*
12. I often do not succeed in cooperating with others in a mutually satisfactory way	1.06	1.02	0–3	1.17	1.02	0-3	0.98	1.02	0-3	0.19

Note. N = 150. SASPD = Standardized Assessment of Severity of Personality Disorder; LPFS-BF = Level of Personality Functioning Scale—Brief Form 2.0; d = Cohen's d effect size (minus indicates that patient score is lower than prisoner scores). \*Significant at the 0.05 level.







features (e.g., Bully & Attack mode and Enraged Child mode) in comparison to the psychiatric outpatients. The prisoners also confirmed having used the following substances within the last year: opioids including heroin (16.5%), CNS stimulants including cocaine and amphetamine (60.0%), cannabis including skunk and pot (56.5%), benzodiazepenes including valium (28.2%), hallucinogens including LSD and mescaline (12.9%), excessive alcohol (51.8%), and other substances (14.1%).

In the present study the two subsamples were combined in order to ensure sample heterogeneity and circumventing range restrictions.

As a routine part of their respective assessment and treatment programs, each participant was administered a battery of computerized self-report inventories including the SASPD and the LPFS-BF 2.0 as well as the external criterion measures employed in the present study. Accordingly, all participants received individual feedback on their test scores. Participants provided consent to have their data used for research purposes, and the study was approved by the local scientific ethics committee.

#### **MEASURES**

Standardized Assessment of Severity of Personality Disorder (SASPD). The SASPD is a nine-item self-report measure of personality disorder severity according to the currently proposed ICD-11 classification (Olajide et al., 2018).<sup>3</sup> The participant is requested to rate the impact of nine personality-related problems on a four-point scale (0 = absent, 1 = mild, 2 = moderate, and 3 = severe). The Danish translation of the SASPD was carried out according to international guidelines (Hambleton, 2001). First, the SASPD items were consensus-translated from the original English version into Danish by a team of three psychologists and one psychiatrist, all with expertise in PDs (Bach, Kongersley, Olsen, & Simonsen, 2016). Subsequently, the items were "backtranslated" into English by a blinded psychologist fluent in both English and Danish, and eventually, the back-translation of the SASPD was approved by its author. Initial psychometric evaluation of the SASPD suggests that the measure has good predictive ability for determining mild and moderate personality disorder severity, and the test-retest stability is high (Olajide et al., 2018). The nine SASPD items with descriptive statistics are presented in Table 3.

Level of Personality Functioning Scale–Brief Form 2.0 (LPFS-BF). The LPFS-BF is a 12-item self-report measure of the Level of Personality Functioning Scale (Hutsebaut et al., 2016). In the current study, we employed version 2.0 of the LPFS-BF (Bach & Hutsebaut, 2018; Weekers, Hutsebaut, & Kamphuis, 2017), where the respondent is requested to rate each item on a four-point Likert scale (0 = very false or often false; 1 = sometimes or somewhat false;







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<sup>3.</sup> At the time of writing, the ICD-11 proposal is being further revised. Apparently, the final ICD-11 model of PD severity will substantially align with the *DSM-5* level of personality functioning approach, including a more explicit focus on self- and interpersonal functioning and a separate borderline pattern qualifier. However, the emphasis on harm toward self and/or others is maintained in the forthcoming ICD-11 classification of PD severity.

2 = sometimes or somewhat true; 3 = very true or often true). Each item is intended to capture the basic underlying impairment related to the 12 facets of functioning specified in the LPFS. For example, the three specific facets related to identity are captured by item 1 ("I often do not know who I really am"), item 2 ("I often think very negatively about myself"), and item 3 ("My emotions change without me having a grip on them"). Translational procedure and preliminary psychometric properties are reported elsewhere (Bach & Hutsebaut, 2018; Bach, Simonsen, Westergaard-Olsen, Kongerslev, & Simonsen, 2017; Weekers et al., 2017). The 12 LPFS-BF items with descriptive statistics are presented in Table 3.

World Health Organization 5 Well-Being Index (WHO-5). The WHO-5 is a self-report measure of subjective psychological well-being that indirectly measures how mental problems impair well-being and quality of life. The tool reflects the positive tone of WHO by describing psychological health instead of mental distress (Bech, 2012; Topp, Østergaard, Søndergaard, & Bech, 2015). The measure consists of five simple and noninvasive items that tap into the subjective well-being of the respondents. In the present study, we scored the WHO-5 according to the official scoring algorithm: Each of the five items is rated on a 6-point Likert scale from 0 (= not present) to 5 (= constantly present). The theoretical raw score ranges from 0 to 25 and is transformed into a scale from 0 (worst thinkable well-being) to 100 (best thinkable well-being) by multiplying with 4. Thus, higher scores mean better well-being.

Personality Severity Index (PSI). The PSI is a severity index for personality disorders (Karterud et al., 1995) that is derived from the 90-item Symptom Checklist 90–Revised (SCL-90-R; Derogatis, 1992). Each item was rated on a 5-point Likert scale from (0) not at all to (4) extremely. The PSI should be minimally confounded by coexisting anxiety and mood disorders and stable over time (Karterud et al., 1995). The PSI is estimated by averaging the SCL-90-R scores for interpersonal sensitivity, hostility, and paranoid ideation. The psychometric qualities of the Danish version of those three SCL-90-R subscales have been empirically supported (Olsen, Mortensen, & Bech, 2004).

Personality Inventory for DSM-5 Short Form (PID-5 SF). The PID-5 SF is an abbreviated 100-item version of the original 220-item PID-5 form (Krueger, Derringer, Markon, Watson, & Skodol, 2012; Maples et al., 2015). The content of the PID-5 items and the 25 generated trait facets is derived from recognized PD features, including the 10 retained DSM-IV PD types along with empirically based trait models of personality pathology (Krueger et al., 2012). Accordingly, in the present study, we employed the total composite score of the PID-5 as a proxy for PD severity consistent with the view that severity represents the fundamental quality ("g factor") that links all of the PD features (Crawford et al., 2011; Hopwood et al., 2011; Samuel, Hopwood, Krueger, Thomas, & Ruggero, 2013; Sharp et al., 2015). The reliability and validity of the Danish version of the PID-5 SF has been empirically supported and strongly aligns with the original PID-5 (Bach, Maples-Keller, Bo, & Simonsen, 2016).









Young Schema Questionnaire Short Form 3 (YSQ-S3). The YSQ-S3 is a 90-item inventory that measures maladaptive schemas according to Jeffrey E. Young's schema-focused approach to PDs (Young, 2005; Young, Klosko, & Weishaar, 2003). Each item is rated on a six-point Likert-type scale ranging from 1 (completely untrue of me) to 6 (describes me perfectly). Essentially, maladaptive schemas are comparable to Bowlby's concept of internal working models. Thus, individuals function with a complex set of schemas about self and others that have been shaped by early experiences with caregivers and are then generalized to self-concept and relationships later in life. For example, individuals with avoidant PD are burdened by maladaptive schemas centering on a self that is defective while expecting to be rejected by others because of their flaws (Bender, Morey, & Skodol, 2011; Jovev & Jackson, 2004). Likewise, research suggests that impaired interpersonal functioning in borderline personality disorder is associated with maladaptive schemas in terms of biased processing of social information (Unoka, Fogd, Seres, Kéri, & Csukly, 2015). Generally, studies have shown that maladaptive schemas are associated with categorical and dimensional measures of personality pathology (e.g., Bach, Lee, Mortensen, & Simonsen, 2016; Bach, Simonsen, Christoffersen, & Kriston, 2017; Jovev & Jackson, 2004). Finally, one particular study found conceptually coherent associations between maladaptive schema domains and levels of personality organization (Eurelings-Bontekoe, Luyten, Ijssennagger, van Vreeswijk, & Koelen, 2010).

Consistent with the most recent theory and research (Bach, Lockwood, & Young, 2018), we used four higher-order schema domains covering core themes of personality dysfunction: (1) Disconnection and Rejection (the expectation that one's needs for love, safety, empathy, nurturance, expression and sharing of feelings, social belonging, spontaneity, praise, and respect will not be met in a consistent manner), (2) Impaired Autonomy and Performance (expectations about oneself and others that interfere with the perceived ability to function independently in everyday life, perform successfully in areas of achievement, and express one's own needs and feelings freely; often involves the fear of being abandoned or left alone, and a strong sense that the world is dangerous), (3) Excessive Responsibility and Standards (excessive emphasis on meeting strict, internalized rules and expectations about performance across many aspects of life, which may include an excessive focus on responsibility to others, orderliness, duty, or proper behavior, often at the expense of one's own happiness, self-expression, relaxation, close relationships, or health), and (4) Impaired Limits (deficiency in internal limits, responsibility to others, or long-term goal orientation, which leads to difficulty respecting the rights of others, cooperating with others, making commitments, controlling one's emotions and impulses, setting and meeting realistic personal goals; core features are entitlement and excessive search for approval from others). The Danish version of YSQ-S3 has demonstrated sound psychometric features and meaningful convergence with PDs (Bach, Simonsen, Christoffersen, et al., 2017).

Schema Mode Inventory (SMI). The SMI is a 118-item inventory measuring 14 modes according to the schema mode model of severe personality pathology developed by Jeffrey E. Young and Michael B. First (2003), and subsequently









operationalized by Lobbestael and colleagues (2010). Each item is rated on a six-point Likert-type scale ranging from 1 (never or almost never) to 6 (always). In traditional cognitive models, PDs are considered to be schematically based, whereas the theory of modes has been put forward to further explain severe and fluctuating psychopathology of personality disorders, including affective instability and dissociation (Beck, 1996; Young et al., 2003). Modes are basically sets of activated schemas along with dysfunctional coping responses (e.g., detached protector, compliant surrenderer, and bully & attack), and include momentary regressions to childlike affective-behavioral responses triggered by current emotionally threatening experiences (e.g., vulnerable, angry, impulsive, and enraged child modes). A mode may also reflect an internalized punitive or demanding authority/parent in terms of self-criticism or punishment (e.g., the punitive or demanding parent). Finally, the model also describes functional modes reflecting psychological health and fulfillment of one's own emotional needs (e.g., healthy adult and happy child). In the literature, modes are also referred to as activated "internal subjects" or "ego-states" (Arntz & Jacob, 2012).

Research strongly indicates that the SMI scales differentially capture features of PDs (Bach, Lee et al., 2016; Bamelis, Renner, Heidkamp, & Arntz, 2011), including criminal/violent behavior (Keulen-de Vos et al., 2016), borderline-related dissociation (Johnston, Dorahy, Courtney, Bayles, & O'Kane, 2009), and levels of personality organization (Eurelings-Bontekoe et al., 2010). The psychometric qualities of the Danish translation of SMI have been supported (Reiss, Krampen, Christoffersen, & Bach, 2016).

# **RESULTS**

# **CORRELATION ANALYSES**

First, we ran a series of Pearson correlation analyses in order to determine the zero-order associations between the LPFS-BF and SASPD and a variety of external correlates (i.e., Personality Severity Index, PID-5 total, WHO-5 Well-Being Index, YSQ schemas, SMI modes, and suicidality). These correlation analyses are shown in Table 4 (item-level correlations are reported in supplemental Tables A1–A3). Generally speaking, most external correlates were at least moderately correlated with both the LPFS-BF (rs = .19 [lifetime suicidality] –.84 [PID-5 total]), and the SASPD (rs = .19 [lifetime suicidality] –.71 [YSQ: Disconnection and Rejection]). The exception to this was lifetime suicidality. Both the LPFS-BF and the SASPD showed small, non-significant associations with lifetime presence of suicidal ideation.

Of particular interest in the current study, however, was a comparison for these associations across the LPFS-BF and SASPD in order to examine whether *DSM-5* or ICD-11 personality impairment showed stronger associations with expected correlates. In order to evaluate this, we conducted a series of Steiger's *z* tests in order to determine if the magnitude of these correlations was significantly different. These results are shown in Table 4. In the majority of comparisons, statistically significant differences were found, wherein the LPFS-BF showed stronger correlations than the SASPD with most external







**TABLE 4. Correlation and Hierarchical Regression Analyses** 

	SASPD	LPFS-BF		SASPD	LPFS-BF	LPFS-BF	SASPD
	r	r	Steiger's z test	<b>R</b> <sup>2</sup>	$\Delta R^2$	<b>R</b> <sup>2</sup>	$\Delta R^2$
WHO-5 Well-Being <sup>a</sup>	-0.35**	-0.52**	2.55*	.120**	.157**	.274**	.003
PSI Severity <sup>a</sup>	0.59**	0.72**	2.49*	.345**	.216**	.515**	.046**
PID-5 Total (severity) <sup>a</sup>	0.67**	0.83**	3.84**	.446**	.296**	.688**	.055**
Maladaptive Schema Domains							
YSQ DR <sup>b</sup>	0.71**	0.79**	1.88	.476**	.205**	.605**	.076**
YSQ IAPb	0.57**	0.75**	3.50*	.323**	.225**	.521**	.028*
YSQ ERS <sup>b</sup>	0.28*	0.60**	4.86**	.077*	.300**	.364**	.012
YSQ IL <sup>b</sup>	0.51**	0.63**	2.03	.261**	.157**	.390**	.028*
Schema Modes							
SMI VCb	0.56**	0.77**	4.15*	.316**	.288**	.519**	.015
SMI ACb	0.66**	0.64**	-0.38	.431**	.095**	.412**	.113**
SMI ECb	0.52**	0.36**	-2.41*	.275**	.003	.130**	.148**
SMI ICb	0.47**	0.58**	1.78	.223**	.133**	.332**	.024
SMI UCb	0.50**	0.65**	2.56*	.245**	.188**	.413**	.018
SMI HCb	-0.60**	-0.76**	3.22*	.359**	.255**	.518**	.029*
SMI CSb	0.23*	0.49**	3.74*	.054*	.194**	.241**	.007
SMI DPrb	0.61**	0.74**	2.58*	.373**	.218**	.549**	.042*
SMI DSb	0.34**	0.55**	3.18*	.112*	.185**	.297**	.000
SMI SA <sup>b</sup>	0.38**	0.46**	1.18	.148**	.078*	.208**	.019
SMI BAb	0.50**	0.42**	-1.22	.247**	.022	.175**	.094*
SMI PPb	0.43**	0.68**	4.21**	.183**	.279**	.462**	.000
SMI DPb	0.35**	0.60**	3.89**	.120**	.245**	.364**	.001
SMI HA <sup>b</sup>	-0.38**	-0.66**	4.55**	.144**	.286**	.430**	.000
Suicidality: Recent <sup>c</sup>	0.24*	0.32*	1.11	.058*	.052*	.102*	.007
Suicidality: Lifetime <sup>c</sup>	0.19	0.19	0.00	.037	.011	.036	.011

Note. \*n = 150; \*bn = 98; \*cn = 85. SASPD = Standardized Assessment of Severity of Personality Disorder; LPFS-BF = Level of Personality Functioning Scale – Brief Form; WHO-5 Well-Being = World Health Organziation-5 Well-Being Index; PSI = Personality Severity Index; PID-5 = Personality Inventory for DSM-5; YSQ = Young Schema Questionnaire; SMI = Schema Mode Inventory; DR = Disconnection and Rejection; IAP = Impaired Autonomy and Performance; ERS = Excessive Responsibility and Standards; IL = Impaired Limits; VC = Vulnerable Child; AC = Angry Child; EC = Enraged Child; IC = Impulsive Child; UC = Undisciplined Child; HC = Happy/Content Child; CS = Compliant Surrenderer; DPr = Detached Protector; DS = Detached Self-Soother; SA = Self-Aggrandizer; BA = Bully and Attack; PP = Punitive Parent; DP = Demanding Parent; HA = Healthy Adult. \*\*p < .001. \*p < .05.

correlates (i.e., WHO-5 Well-Being Index, Personality Severity Index, PID-5 total, YSQ: Impaired Autonomy and Performance, YSQ: Excessive Responsibility and Standards, and most SMI scales). However, there were numerous exceptions to this where no significant differences were observed (i.e., YSQ: Disconnection and Rejection, YSQ: Impaired Limits, SMI: Angry Child, SMI:







Impulsive Child, SMI: Self-Aggrandizer, SMI: Bully and Attack, and suicidality). There was one instance in which the SASPD showed a stronger correlation with an external correlate (SMI Enraged Child) than the LPFS.

#### HIERARCHICAL REGRESSION ANALYSES

In order to further examine the contributions of the LPFS-BF and SASPD in predicting theoretically expected external correlates, we conducted a series of hierarchical regressions. First, we regressed each external correlate onto the LPFS-BF in the first step and the LPFS-BF and SASPD in the second step to determine to what extent the SASPD added predictive utility over and above the LPFS-BF. Additionally, we evaluated the contribution of the LPFS-BF over and above the SASPD by conducting hierarchical regression analyses in which SASPD was entered into step one and the SASPD and LPFS-BF were entered into step two. These analyses are shown in Table 4.

In nearly every case (with past suicidality being the exception), the LPFS-BF significantly predicted external correlates (accounting for between approximately 4% and 69% of the variance) in the first step. In the majority of cases, the SASPD significantly added to the prediction of external correlates over and above the LPFS-BF; however, the variance accounted for tended to be small in most cases (i.e., approximately 0–8% accounted for). When the opposite was examined, the SASPD significantly predicted the large majority of external correlates (again, past suicidality being the exception). In addition, the LPFS-BF tended to significantly predict external correlates over and above the SASPD. In this case, however, the amount of variance predicted was more substantial (1–31% variance accounted for), and in several cases, the LPFS-BF predicted a larger proportion of variance in the second step than the SASPD predicted in the first step.

#### DISCUSSION

The present study examined self-reported PD symptom severity/impairment from the *DSM-5* and the proposed ICD-11 perspectives. More specifically, we evaluated the associations each model has with external correlates in order to delineate whether these models are situated in a similar nomological network. In addition, we examined how impairment/severity from both perspectives differs in their associations with relevant external correlates. Generally speaking, we found that both the ICD-11 (measured by the SASPD) and the *DSM-5* (measured by the LPFS-BF) impairment perspectives were associated with relevant external correlates. However, some important differences should be noted.

Based on their correlation patterns, the LPFS-BF may have better sensitivity in detecting core personality disorder features, including personality-related distress and self-pathology, while the SASPD may have better specificity in terms of capturing potential harmful personality disorder, including aggression and violence. Accordingly, the ICD-11 proposal is primarily rooted in the British zeitgeist, where severe personality disorder is strongly associated with a "dangerous" personality disorder (Maden & Tyrer, 2003). Indeed, the









SASPD showed stronger correlations with several modes on the SMI. These include Angry Child, which indicates anger and demanding/hostile behaviors (e.g., "I'm angry with someone for leaving me alone or abandoning me"); Enraged Child, which indicates more extreme levels of rage and destructive/physically aggressive behaviors (e.g., "If I get angry, I can get so out of control that I injure other people"); and Bully and Attack, which indicates strategic bullying, hurting, or domination of others (e.g., "By dominating other people, nothing can happen to you").

Consistent with hypotheses, this suggests that the SASPD tends to emphasize "dangerous" (i.e., harm to self or others) qualities of an individual, rather than impairment/severity stemming from distress. Notably, however, the SASPD did not show strong associations with suicidality. Conversely, the LPFS-BF tended to emphasize distress and internalizing psychopathology. The literature suggests that internalizing psychopathology (e.g., emotional instability, anxiousness, and self-loathing) relates to impairment incrementally and gradually, because internalizing appears to accelerate in effect at some level of severity (Markon, 2010). Accordingly, it would be expected that emotional distress (including symptomatology) increases along with level of severity/impairment, and the other way around. The LPFS-BF explicitly captures features of self-pathology, including poor self-worth and affective instability, which therefore may have caused particularly high correlations with subjective well-being (WHO-5) and self-reported suicidality. Moreover, the taxonomy of maladaptive schemas was developed within a setting focused on avoidant-, dependent-, and mild borderline PD (Young et al., 2003), which is therefore assumed to be less representative of the harmful consequences that are emphasized in the ICD-11 proposal. Therefore, the relatively better performance of the LPFS-BF over the SASPD may be, at least in part, a product of the external correlates chosen and the theoretical differences in each model's respective definition of severity.

Based on the hierarchical regression analyses, it appears as if both measures of severity/impairment may be clinically useful. Indeed, each model supplemented the other across the majority of analyses, albeit with small added amounts of variance at times. Therefore, it seems that each model may benefit from aspects of the other model. In other words, the primary focus of harm to self and harm to others from the ICD-11 perspective may benefit from an expansion covering aspects of distress, and conversely, the distress-focused *DSM-5* perspective may be supplemented by the addition of "dangerous" qualities reflected in the ICD-11 proposal. Beyond potential future revisions to these measures, this information is also useful from an applied clinical perspective, as level of impairment and symptom severity are likely to be measured somewhat differently for an individual dependent upon the model being used.

#### LIMITATIONS AND FUTURE DIRECTIONS

Limitations to the current study should be addressed. First, all measures were concurrently self-reported, thus increasing the risk for artificially high correlations among scales (Campbell & Fiske, 1959). In order to mitigate the impact of this limitation, we focused on correlations that were at least moderate in magnitude. Second, although an evaluation of these self-report measures is







important, more definitive findings would have been obtained if this study had also included structured clinical interviews or clinician/informant ratings. Therefore, future research in this area should expand the current methodology to include such data. Third, the present study did not include observer measures or public records testifying to interpersonally harmful acts or self-harm, which are essential features of the proposed ICD-11 severity concept. This may have accounted for the surprisingly small associations between the SASPD and suicidality. Additional key components of the proposed ICD-11 diagnostic guidelines (e.g., risk behaviors) were also under-represented in our external criteria. Future research would benefit from a more comprehensive examination of self-harm and other risky behaviors among participants.

Despite these limitations, the current study offers a nuanced examination of personality disorder severity from both the *DSM-5* and the proposed ICD-11 perspectives in outpatient and forensic populations. Although additional research is needed, our results suggest that both the current ICD-11 proposal and the *DSM-5* model offer somewhat unique definitions of impairment that may supplement one another in measuring relevant external criteria.

#### **APPENDIX**

TABLE A1. Item-Level Correlations Between SASPD and LPFS-BF

	SASPD Items										tal
LPFS-BF Items	1.	2.	3.	4.	5.	6.	7.	8.	9.	SASPD	LPFS-BF
1. I often do not know who I really am	0.34	0.23	0.14	0.06	0.07	0.38	0.18	0.08	0.22	0.35	0.69
2. I often think very negatively about myself	0.33	0.19	0.11	0.04	0.02	0.55	0.21	-0.07	0.18	0.33	0.77
3. My emotions change without me having a grip on them	0.36	0.23	0.18	0.27	0.30	0.49	0.17	0.08	0.20	0.49	0.78
4. I have no sense of where I want to go in my life	0.38	0.10	0.24	0.06	0.22	0.30	0.21	0.18	0.32	0.41	0.66
5. I often do not understand my own thoughts and feelings	0.43	0.21	0.17	0.11	0.27	0.36	0.07	0.12	0.26	0.42	0.78
6. I often make unrealistic demands on myself	0.26	0.08	0.07	-0.02	0.02	0.31	0.17	-0.08	0.11	0.19	0.61
7. I often have difficulty understanding the thoughts and feelings of others	0.22	0.11	0.17	0.20	0.23	0.07	0.07	0.36	0.11	0.32	0.48
8. I often find it hard to stand it when others have a different opinion	0.16	0.12	0.03	0.27	0.30	0.25	-0.01	0.13	0.10	0.30	0.50
9. I often do not fully understand why my behavior has a certain effect on others	0.14	0.18	0.22	0.24	0.42	0.21	0.09	0.37	0.08	0.42	0.51
10. My relationships and friendships never last long	0.32	0.13	0.34	0.10	0.17	0.33	0.18	0.14	0.27	0.41	0.61
11. I often feel very vulnerable when relations become more personal	0.35	0.31	0.17	0.27	0.29	0.45	0.26	0.07	0.13	0.49	0.70
12. I often do not succeed in cooperating with others in a mutually satisfactory way	0.40	0.25	0.36	0.29	0.35	0.13	0.17	0.24	0.13	0.49	0.62
SASPD	0.62	0.54	0.60	0.65	0.56	0.51	0.38	0.47	0.40	_	0.58
LPFS-BF	0.47	0.27	0.26	0.22	0.31	0.53	0.23	0.18	0.28	0.58	

Note. SASPD items: 1 = being with others; 2 = trusting other people; 3 = friendships; 4 = temper; 5 = acting on impulse; 6 = worrying; 7 = being organized; 8 = caring about other people; 9 = self-reliance.







# ICD-11 PD SEVERITY AND PERSONALITY FUNCTIONING

# **TABLE A2. SASPD Item-Level Correlations**

	TABLE A2. SASED Rem-Level Correlations											
	1.	2.	3.	4.	5.	6.	7.	8.	9.			
1. Being with others												
2. Trusting other people	0.27											
3. Friendships	0.44	0.20										
4. Temper	0.23	0.38	0.29									
5. Acting on impulse	0.22	0.20	0.14	0.43								
6. Worrying	0.34	0.20	0.19	0.11	0.02							
7. Being organized	0.19	0.12	0.15	0.05	-0.02	0.29						
8. Caring about other people	0.07	0.07	0.25	0.38	0.41	-0.05	0.08					
9. Self-reliance	0.28	0.06	0.12	0.00	0.13	0.26	0.09	0.09				
WHO-5 Well-Being <sup>a</sup>	-0.33	-0.23	-0.13	-0.05	-0.13	-0.38	-0.21	0.08	-0.30			
PSIa	0.37	0.36	0.32	0.34	0.33	0.42	0.22	0.14	0.26			
PID-5 Total (severity) <sup>a</sup>	0.41	0.33	0.24	0.37	0.49	0.43	0.22	0.36	0.31			
YSQ DR <sup>b</sup>	0.53	0.47	0.27	0.26	0.37	0.46	0.39	0.30	0.29			
YSQ IAPb	0.39	0.25	0.21	0.14	0.26	0.51	0.33	0.14	0.44			
YSQ ERS <sup>b</sup>	0.28	0.18	0.04	-0.01	0.08	0.37	0.24	0.04	0.08			
YSQ IL <sup>b</sup>	0.30	0.26	0.14	0.20	0.37	0.30	0.20	0.35	0.30			
SMI VCb	0.43	0.33	0.15	0.16	0.23	0.60	0.35	0.10	0.29			
SMI ACb	0.36	0.37	0.15	0.47	0.53	0.46	0.21	0.32	0.15			
SMI ECb	0.20	0.27	0.19	0.62	0.47	0.15	0.01	0.31	0.12			
SMI ICb	0.18	0.18	0.10	0.31	0.63	0.21	0.03	0.39	0.15			
SMI UCb	0.38	0.22	0.14	0.13	0.27	0.44	0.28	0.09	0.37			
SMI HCb	-0.50	-0.42	-0.26	-0.10	-0.15	-0.54	-0.39	-0.12	-0.37			
SMI CSb	0.18	0.10	0.18	-0.09	0.07	0.37	0.20	-0.15	0.19			
SMI DPr <sup>b</sup>	0.51	0.32	0.23	0.21	0.24	0.37	0.43	0.32	0.33			
SMI DS <sup>b</sup>	0.17	0.16	0.06	0.16	0.21	0.36	0.32	0.08	0.02			
SMI SA <sup>b</sup>	0.29	0.17	0.07	0.19	0.45	0.16	0.09	0.38	0.05			
SMI BAb	0.32	0.22	0.07	0.41	0.49	0.15	0.06	0.55	0.12			
SMI PPb	0.37	0.23	0.02	0.12	0.18	0.51	0.34	0.09	0.17			
SMI DPb	0.30	0.24	0.12	0.04	0.09	0.43	0.34	-0.03	0.09			
SMI HAb	-0.30	-0.26	-0.12	-0.01	-0.08	-0.45	-0.22	-0.02	-0.35			
Suicidality: Recent <sup>c</sup>	0.32	0.05	0.08	0.18	0.13	0.26	0.09	-0.08	0.13			
Suicidality: Lifetime <sup>c</sup>	0.16	0.01	0.17	0.14	0.04	0.21	0.13	-0.10	0.17			

Note.  ${}^{a}n = 150$ ;  ${}^{b}n = 98$ ;  ${}^{c}n = 85$ . Correlation coefficients of at least medium effect size ( $\geq$  .50) are bolded.







TARLE A3. LPES-RE Item-Level Correlations

	TABLE A3. LPFS-BF Item-Level Correlations											
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. I often do not know who I really am												
2. I often think very negatively about myself	0.54											
3. My emotions change without me having a grip on them	0.47	0.64										
4. I have no sense of where I want to go in my life	0.39	0.46	0.52									
5. I often do not understand my own thoughts and feelings	0.53	0.56	0.65	0.50								
6. I often make unrealistic demands on myself	0.52	0.57	0.37	0.39	0.39							
7. I often have difficulty understanding the thoughts and feelings of others	0.21	0.19	0.28	0.19	0.38	0.07						
8. I often find it hard to stand it when others have a different opinion	0.26	0.27	0.34	0.25	0.27	0.22	0.23					
9. I often do not fully understand why my behavior has a certain effect on others	0.24	0.14	0.36	0.20	0.37	0.09	0.48	0.26				
10. My relationships and friendships never last long	0.33	0.42	0.31	0.42	0.41	0.29	0.26	0.24	0.25			
11. I often feel very vulnerable when relations become more personal	0.34	0.60	0.55	0.29	0.50	0.29	0.24	0.34	0.36	0.41		
12. I often do not succeed in cooperating with others in a mutually satisfactory way	0.39	0.33	0.51	0.45	0.46	0.32	0.43	0.39	0.41	0.33	0.43	
WHO-5 Well-Being <sup>a</sup>	-0.39	-0.48	-0.44	-0.40	-0.43	-0.34	-0.14	-0.23	-0.13	-0.25	-0.42	-0.23
PSIa	0.43	0.58	0.58	0.41	0.52	0.41	0.39	0.43	0.37	0.39	0.60	0.58
PID-5 Total (severity) <sup>a</sup>	0.55	0.58	0.66	0.52	0.61	0.43	0.45	0.50	0.50	0.45	0.65	0.61
YSQ DR <sup>b</sup>	0.52	0.61	0.55	0.49	0.58	0.47	0.37	0.36	0.45	0.54	0.65	0.51
YSQ IAP <sup>b</sup>	0.47	0.64	0.61	0.52	0.61	0.46	0.28	0.33	0.31	0.50	0.56	0.49
YSQ ERS <sup>b</sup>	0.47	0.62	0.35	0.40	0.51	0.54	0.06	0.26	0.16	0.33	0.50	0.22
YSQ IL <sup>b</sup>	0.43	0.47	0.49	0.41	0.41	0.27	0.30	0.50	0.37	0.39	0.45	0.48
SMI VC <sup>b</sup>	0.50	0.66	0.61	0.56	0.61	0.52	0.30	0.23	0.34	0.47	0.56	0.37
SMI ACb	0.37	0.42	0.55	0.29	0.46	0.29	0.34	0.48	0.53	0.35	0.54	0.49
SMI ECb	0.19	0.13	0.29	0.00	0.30	0.05	0.25	0.45	0.44	0.17	0.38	0.36
SMI ICb	0.25	0.27	0.43	0.31	0.46	0.17	0.44	0.45	0.59	0.32	0.49	0.52
SMI UC <sup>b</sup>	0.46	0.54	0.55	0.50	0.41	0.42	0.23	0.27	0.17	0.49	0.46	0.48
SMI HCb	-0.54	-0.66	-0.57	-0.54	-0.54	-0.49	-0.35	-0.22	-0.26	-0.60	-0.58	-0.44
SMI CSb	0.33	0.52	0.34	0.26	0.40	0.43	0.15	0.16	0.05	0.39	0.38	0.27
SMI DPr <sup>b</sup>	0.52	0.46	0.48	0.62	0.52	0.50	0.43	0.35	0.40	0.51	0.44	0.44
SMI DSb	0.36	0.44	0.45	0.34	0.36	0.36	0.17	0.39	0.28	0.20	0.49	0.27
SMI SA <sup>b</sup>	0.29	0.22	0.34	0.24	0.35	0.23	0.26	0.44	0.44	0.17	0.30	0.30
SMI BAb	0.22	0.09	0.33	0.25	0.39	0.04	0.32	0.49	0.54	0.12	0.28	0.31
SMI PPb	0.47	0.65	0.44	0.46	0.51	0.55	0.18	0.28	0.23	0.40	0.57	0.26
SMI DPb	0.49	0.60	0.44	0.29	0.48	0.59	0.15	0.24	0.20	0.27	0.44	0.26
SMI HA <sup>b</sup>	-0.50	-0.60	-0.45	-0.43	-0.52	-0.47	-0.31	-0.23	-0.19	-0.46	-0.42	-0.45
Suicidality: Recent <sup>c</sup>	0.17	0.27	0.42	0.34	0.38	-0.05	0.04	0.09	0.12	0.02	0.29	0.15
Suicidality: Lifetime <sup>c</sup>	0.00	0.21	0.26	0.10	0.23	-0.02	-0.15	0.12	0.02	0.16	0.31	0.09

Note.  ${}^{a}n = 150$ ;  ${}^{b}n = 98$ ;  ${}^{c}n = 85$ . Correlation coefficients of at least medium effect size ( $\geq$  .50) are bolded.











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