

# UC Davis

## UC Davis Previously Published Works

### Title

A Brief but Comprehensive Review of Research on the Alternative DSM-5 Model for Personality Disorders

### Permalink

<https://escholarship.org/uc/item/17v5n4jd>

### Journal

Current Psychiatry Reports, 21(9)

### ISSN

1523-3812

### Authors

Zimmermann, Johannes  
Kerber, André  
Rek, Katharina  
[et al.](#)

### Publication Date

2019-09-01

### DOI

10.1007/s11920-019-1079-z

Peer reviewed



# A Brief but Comprehensive Review of Research on the Alternative DSM-5 Model for Personality Disorders

Johannes Zimmermann<sup>1</sup> · André Kerber<sup>2</sup> · Katharina Rek<sup>3</sup> · Christopher J. Hopwood<sup>4</sup> · Robert F. Krueger<sup>5</sup>

© Springer Science+Business Media, LLC, part of Springer Nature 2019

## Abstract

**Purpose of Review** Both the Alternative DSM-5 Model for Personality Disorders (AMPD) and the chapter on personality disorders (PD) in the recent version of ICD-11 embody a shift from a categorical to a dimensional paradigm for the classification of PD. We describe these new models, summarize available measures, and provide a comprehensive review of research on the AMPD.

**Recent Findings** A total of 237 publications on severity (criterion A) and maladaptive traits (criterion B) of the AMPD indicate (a) acceptable interrater reliability, (b) largely consistent latent structures, (c) substantial convergence with a range of theoretically and clinically relevant external measures, and (d) some evidence for incremental validity when controlling for categorical PD diagnoses. However, measures of criterion A and B are highly correlated, which poses conceptual challenges.

**Summary** The AMPD has stimulated extensive research with promising findings. We highlight open questions and provide recommendations for future research.

**Keywords** Personality disorders · DSM-5 · ICD-11 · Dimensional models · Reliability · Validity

## Introduction

The current classification systems of personality disorder (PD) in DSM-5 section II [1] and ICD-10 [2] have various shortcomings. For example, the assumption that PDs are categories is incompatible with most available evidence, the thresholds for defining the presence of a PD are largely arbitrary, and the assignment of individual PD symptoms to specific disorders does not correspond to their empirical covariation [3–5]. As a

result of these shortcomings, many patients in clinical practice misleadingly receive multiple PD diagnoses, a “not otherwise specified” PD diagnosis, or no PD diagnosis at all, even if a PD diagnosis is relevant to the presentation [6, 7].

To overcome this unfortunate situation, the field is currently shifting toward dimensional models of PDs. The most prominent examples of this ongoing process are the Alternative DSM-5 Model for PD (AMPD) in DSM-5 section III [1] and the chapter on PD and related traits in the recent version of ICD-11 [8]. The common denominator of these models is a twofold conceptualization that involves (a) impairments in self and interpersonal functioning to represent general features and severity of PD and (b) maladaptive personality traits to represent stylistic differences in the expression of PD [9–11]. In the present paper, we outline the two models, summarize measures that were recently developed for assessing PD severity and style according to these models, and provide a comprehensive review of recent research using these measures. The focus will be primarily on the AMPD, as it has accumulated far more research evidence since its publication in 2013 than the ICD-11 model, which will become effective in 2022.

---

This article is part of the Topical Collection on *Personality Disorders*

✉ Johannes Zimmermann  
jz@uni-kassel.de

<sup>1</sup> Department of Psychology, University of Kassel, Holländische Str. 36-38, 34127 Kassel, Germany

<sup>2</sup> Freie Universität Berlin, Berlin, Germany

<sup>3</sup> Max-Planck-Institut für Psychiatrie, Munich, Germany

<sup>4</sup> University of California, Davis, CA, USA

<sup>5</sup> University of Minnesota, Minneapolis, MN, USA

## Dimensional Models of Personality Pathology in DSM-5 and ICD-11

### Alternative DSM-5 Model for PD

The AMPD is considered as an “emerging model” in section III of the DSM-5 [12–14]. The key innovation of the AMPD is to define PDs on the basis of impairments in personality functioning (criterion A) and the presence of maladaptive personality traits (criterion B). Further general criteria related to the cross-situational rigidity and temporal stability of behavioral patterns (criteria C and D) as well as to the exclusion of various alternative explanations (criteria E–G) largely correspond to the current classification system of PD in DSM-5 section II.

Criterion A is used to determine the severity of PD and can be assessed using the Level of Personality Functioning Scale (LPFS) [15]. The LPFS is based on the assumption that the shared features of all PDs involve impairments of basic capacities that are crucial for adaptive self and interpersonal functioning. In particular, the LPFS integrates four domains (or “elements”) of personality functioning: identity and self-direction capture capacities related to the self, while empathy and intimacy capture capacities related to interpersonal relationships. In addition, each domain is broken down further into three subdomains. For example, intimacy means that a person (a) can enter into deep and lasting relationships with other people; (b) wishes, and is able, to be close to other people; and (c) treats them with respect. Note that, despite these fine-grained definitions, all domains and subdomains are meant to represent one general dimension of PD severity. The LPFS further grades this continuum along five distinct levels of impairment, starting with little or no impairment (level 0), through some (level 1), moderate (level 2), severe (level 3), and up to extreme impairment (level 4). A moderate impairment (level 2) defines the threshold value for the presence of a PD. To facilitate assessment, the LPFS operationalizes all possible 60 combinations of subdomains and levels using prototypical descriptions.

Criterion B is used to determine the style of PD. For this purpose, a hierarchical model of maladaptive personality traits was developed on the basis of empirical analyses [16]. At a higher level, the model encompasses five broad trait domains of negative affectivity, detachment, antagonism, disinhibition, and psychoticism. At a subordinate level, these domains are further specified by 25 trait facets. For example, disinhibition is subdivided into (a) irresponsibility, (b) impulsivity, (c) distractibility, (d) risk taking, and (e) low rigid perfectionism. For the diagnosis of PD, at least one maladaptive personality trait domain or facet must be in the clinically significant range.

The AMPD also allows for the diagnosis of six PD types. These are antisocial, borderline, narcissistic, schizotypal, avoidant, and obsessive–compulsive PD. The criteria consist of specific combinations of impairments in personality

functioning (criterion A) and maladaptive personality traits (criterion B). For example, to qualify for a diagnosis of narcissistic PD, two of the four domains of functioning must be at least moderately impaired, and the two trait facets grandiosity and attention-seeking must be clearly pronounced. If the individual pattern does not correspond to any of these “prototypical” combinations, the diagnosis of a PD trait specified (PD-TS) can be assigned.

### PD Chapter in ICD-11

The proposal for a revised PD chapter in ICD-11 was first published in 2011 [17] and subsequently modified based on scientific, pragmatic, and political debates [7, 9, 18, 19, 20••, 21–23]. In October 2018, the joint task force of the WHO has declared that the recent version of ICD-11 was stable and ready for the implementation process, and proposed the ICD-11 to come into effect on 1 January 2022 [24].

The PD chapter in ICD-11 can be implemented using a three-step procedure [25]: In the first step, the practitioner examines whether the patient’s pathology corresponds to the general definition of PD (code: 6D10), which emphasizes longstanding problems in self and interpersonal functioning. In the second step, the practitioner identifies the corresponding degree of severity ranging from subthreshold personality difficulty (QE50.7) to mild (6D10.0), moderate (6D10.1), and severe PD (6D10.2). In the third step, the practitioner has the option to specify the presence of prominent personality traits (6D11), including negative affectivity (6D11.0), detachment (6D11.1), dissociality (6D11.2), disinhibition (6D11.3), anankastia (i.e., obsessive–compulsive features) (6D11.4), as well as a borderline pattern (6D11.5). The inclusion of the latter specifier, which essentially corresponds to borderline PD in DSM-5 section II, was highly controversial and can be understood as an effort to ensure a minimum amount of backwards compatibility [9, 18, 19, 20••]. As expertise in PD is considered necessary for this third step, it would be reserved for specialist rather than general care settings.

Obviously, the proposal is similar to the AMPD with regard to the twofold conceptualization of severity and style. However, there are also noteworthy differences. For example, the ICD-11 proposal does not include (a) the possibility to assign specific PD diagnoses (except borderline PD), (b) the assessment of trait domains as a necessary part of the diagnosis, (c) the trait domain of psychoticism, and (d) a subordinate level of trait facets.

### Assessing Severity and Style of Personality Pathology

Coincident with the publication of these models has been the development of new measures. Table 1 provides an overview

**Table 1** Newly developed measures for the assessment of personality pathology according to DSM-5 section III and ICD-11

Measure	Construct	Method	Items	Scales
Clinical Assessment of the Level of Personality Functioning Scale (CALF) [26]	DSM-5 severity	Structured interview	4	1
DSM-5 Levels of Personality Functioning Questionnaire (DLOPFQ) [27, 28]	DSM-5 severity	Self-report	23/132	4/8
Level of Personality Functioning Scale—Self Report (LPFS-SR) [29]	DSM-5 severity	Self-report	80	4
Level of Personality Functioning Scale (LPFS) [1]	DSM-5 severity	Expert rating/informant report/self-report	1/4/12/60	1/4/12
Level of Personality Functioning Scale—Brief Form (LPFS-BF) [30, 31]	DSM-5 severity	Self-report	12	2
Levels of Personality Functioning Questionnaire for Adolescents from 12 to 18 Years (LoPF-Q 12–18) [32]	DSM-5 severity	Self-report	97	4/8
Self and Interpersonal Functioning Scale (SIFS) [33]	DSM-5 severity	Self-report	24	1/4
Semi-Structured Interview for Personality Functioning DSM-5 (STiP-5.1) [34]	DSM-5 severity	Structured interview	12	1/4
Structured Clinical Interview for the Level of Personality Functioning Scale (SCID-AMPD Module I) [35]	DSM-5 severity	Structured interview	12	1/4
Personality Inventory for DSM-5 (PID-5) [16]	DSM-5 traits	Self-report/informant report	25/75/100/218/220*	5/25
Personality Trait Rating Form (PTRF) [1]	DSM-5 traits	Expert rating/informant report/self-report	25	5
Structured Clinical Interview for Personality Traits (SCID-AMPD Module II) [36]	DSM-5 traits	Structured interview	25	5
Standardized Assessment of Severity of Personality Disorder (SASPD) [37]	ICD-11 severity	Self-report	9	1
Personality Inventory for ICD-11 (PiCD) [38]	ICD-11 traits	Self-report	60	5

\*There is also a Norwegian Brief Form (NBF) of the PID-5 that comprises 36 items [39]

of all instruments that directly implement the operationalization of severity and style of PD according to the AMPD and the ICD-11 proposal.

## Severity

In the AMPD, the assessment of PD severity was originally conceived of as applying the LPFS as an expert rating on a single five-point scale [40]. Other researchers have applied the LPFS in a more differentiated way by separately rating the four domains [41, 42], the 12 subdomains [34, 43–46], or the 60 prototypical descriptions [47••] and aggregating the ratings afterwards. To systematically collect the information that is relevant to make these ratings, several structured clinical interviews have been developed, including the Semi-Structured Interview for Personality Functioning DSM-5 (STiP-5.1) [34], the Clinical Assessment of the Level of Personality Functioning Scale (CALF) [26], and the Structured Clinical Interview for the Level of Personality Functioning Scale (SCID-AMPD Module I) [35]. For the purpose of gathering self-report data, some researchers have asked participants to judge themselves according to the prototypical descriptions of the 12 subdomains [48–50]. Only recently, self-report measures building on the LPFS were newly developed, including the Level of Personality Functioning Scale—Self Report (LPFS-SR) [29], the Level of

Personality Functioning Scale—Brief Form (LPFS-BF) [30, 31], the DSM-5 Levels of Personality Functioning Questionnaire (DLOPFQ) [27, 28], the Self and Interpersonal Functioning Scale (SIFS) [33], and the Levels of Personality Functioning Questionnaire for adolescents (LoPF-Q 12–18) [32]. For the purpose of informant ratings, it has been suggested that the 60 prototypical descriptions of the LPFS can also be rated individually by laypersons [47••, 51]. Research on scale development for assessing severity according to ICD-11 is still in its beginnings and includes pilot studies on expert ratings [52] and the development of a brief self-report measure, the Standardized Assessment of Severity of Personality Disorder (SASPD) [37].

## Maladaptive Traits

The most direct way to assess the maladaptive traits of the AMPD is via the Personality Inventory for DSM-5 (PID-5) [16]. The PID-5 is a 220-item self-report questionnaire that can be conceived of as a by-product of the development of the hierarchical trait model. It includes scales for all 25 trait facets and provides two methods for scoring the five higher order trait domains from facet scales [53]. In the meantime, a short form with 100 items [54–59] and a brief form with 25 items [56, 60–66] have been developed, whereby the brief form only covers the five trait

domains. Informant-report forms with 218 items [67] and 75 items [47••] for assessing the 25 trait facets are also available. For the purpose of expert ratings, researchers have applied a Personality Trait Rating Form (PTRF) [41] that includes short descriptions of the 25 trait facets from the DSM-5 manual to be rated on 4-point scales. Recently, the PTRF has also been applied as a self-report measure for laypersons [68]. To systematically collect the information that is relevant for expert ratings, the Structured Clinical Interview for Personality Traits (SCID-AMPD Module II) [36] has been developed. For the assessment of trait domains according to ICD-11, one can use a specific scoring algorithm for the PID-5 [69, 70] or the recently developed Personality Inventory for ICD-11 (PiCD) [38].

### Further Issues

Instruments related to the AMPD have been translated into a number of different languages and cultural contexts. For example, the PID-5 is available and has been successfully applied in Arabic [71], Brazilian [72, 73], Czech [74], Danish [56], Dutch [75], French [76], German [77], Italian [60, 78], Norwegian [54, 79], Persian [80–82], Polish [83], Portuguese [84], Russian [85], Spanish [57, 63, 86], and Swedish [64].

Further developments are underway on assessing severity and style according to the AMPD. For example, disorder-specific impairment scales of criterion A have been developed that allow for investigating whether the individual impairment criteria for the six specific PDs listed under the rubric of criterion A are valid and useful [87, 88••, 89]. Moreover, it has been shown that the Personality Assessment Inventory (PAI) [90], a well-established broadband clinical self-report measure, can be scored to recover the DSM-5 trait domains and facets [91, 92]. For the purpose of assessing dynamic changes in personality pathology, ambulatory assessment measures have been applied with the potential to uncover nuanced temporal dynamics of impairments and maladaptive trait expressions [45, 49, 93].

To ascertain the validity of individual PID-5 results in higher stakes clinical situations, it is important that procedures are in place to safeguard scale interpretation from negligent or malingered response patterns. To this end, the PID-5 Inconsistency Scale has been developed [94] and subsequently replicated in two independent reports [95, 96] to identify random response patterns in the PID-5. Moreover, the PID-5 Over-reporting Scale [97] can detect the tendency to exaggerate or fabricate personality problems, and further scales are available for detecting different types of faking good [98]. A promising way to deal with such response patterns is using alternative measures that employ forced choice technique such as the Goldsmiths-60-item questionnaire [99].

## A Comprehensive Review of Research on the AMPD

Several reviews have already summarized theoretical underpinnings and recent research on the AMPD in general [9, 100, 101, 102••, 103–105], or on criterion A [106•, 107, 108•, 109] and criterion B [110, 111, 112•] in particular. Moreover, several reviews, case reports, and consumer surveys have been published illustrating the clinical utility of the AMPD [113•, 114•, 115–123]. In the following, we provide an updated, comprehensive summary of research on the AMPD. We include only studies that (fully) applied one of the measures listed in Table 1, thereby ensuring a high specificity to the DSM-5 definitions of severity and maladaptive traits. In total, relevant measures were applied in 237 publications, with 18 (7.6%) publications focusing only on criterion A, 201 publications (84.8%) focusing only on criterion B, and 18 publications (7.6%) focusing on both criteria (see Fig. 1). The findings are organized along the questions of interrater reliability (i.e., Do judges agree when assessing the same persons?), internal consistency and latent structure (i.e., Can item responses be aggregated to reliable test scores?), convergent validity (i.e., Are the test scores meaningfully related to other measures?), and incremental validity (i.e., Do test scores provide unique information when predicting outcomes?). Note that we will not cover research on the ICD-11 proposal in this regard, because relevant studies were often based on archival data using earlier measures [124–126], and studies using measures that were explicitly designed for the ICD-11 PD chapter are still scarce [25, 37, 38, 52, 127–130].

### Severity

#### Interrater Reliability

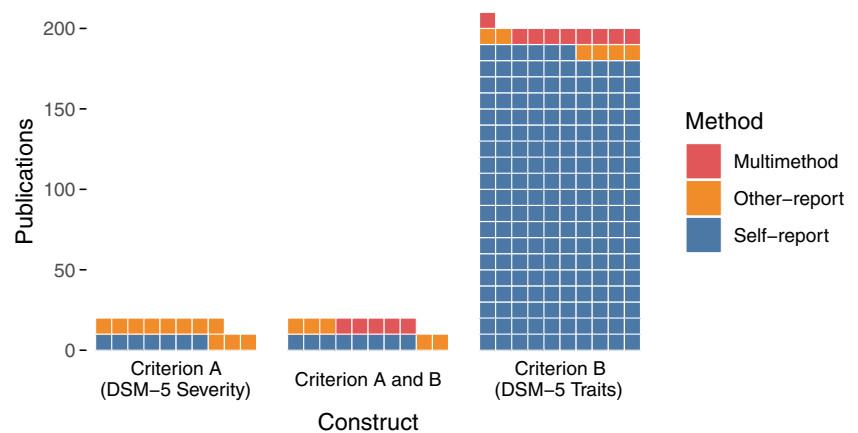
Several studies have examined the interrater reliability of the LPFS. Results indicated that when using the LPFS based on written life history data, case vignettes, systematic interviews, or unstructured clinical impressions, interrater reliability was largely acceptable (with ICCs ranging from 0.42 to 0.67), even for untrained and clinically inexperienced raters [41–44, 46, 50, 131]. However, training sessions may increase the interrater reliability [132], and the interrater reliability tends to be better when based on structured interviews that were explicitly tailored to gathering the required information [26, 34, 133, 134].

#### Internal Consistency and Latent Structure

Internal consistency of the LPFS total score has been shown to be acceptable when computed based on ratings of the four domains [40, 42] and very high when computed based on ratings of subdomains [34, 46, 48, 135] or individual items [29, 51, 136••]. Moreover, the four domains [27, 29, 43, 46,



**Fig. 1** Number of studies that applied measures for assessing severity and maladaptive traits as defined in the Alternative DSM-5 Model for Personality Disorders. Other-reports include one of the following methods: expert ratings, informant reports, and structured interviews



51, 136••] and the 12 subdomains [47••] also showed rather high internal consistency. Most subdomains appear to be unidimensional, albeit this may not be true for all of them (e.g., desire and capacity for closeness is probably more heterogeneous) [47••]. Research on the latent structure of the LPFS subdomains suggests that a model with two strongly correlated factors of self and interpersonal functioning is most appropriate [30, 31, 45, 47••, 135]. Although this may question the theoretical differentiation into four domains, it is consistent with the assumption of a strong general factor of PD severity [29, 46, 136••]. However, factor analyses of individual items failed to recover the theoretical structure [137], which may in part be due to method factors of items with positive and negative valence.

### Convergent Validity

The convergent validity of the LPFS as an expert rating has been demonstrated to be substantial with regard to the presence and/or number of section II PDs [34, 42–44, 46], the number of PD symptoms [34, 40, 41], psychodynamic conceptualizations of PD severity [43, 44, 133], as well as self-reported PD severity [34, 50, 138], maladaptive traits [46], and symptom distress [34, 41]. In addition, studies have established associations with psychosocial functioning, short-term risk, proposed treatment intensity, and estimated prognosis [40], lifetime mental health treatment, history of substance use, mental and physical health, and social and relationship adjustment [46], as well as risk for dropout from inpatient treatment [139].

Initial validation studies of self-report measures assessing criterion A indicated substantial convergence with established measures of personality functioning and PD severity [29–31, 33, 128, 129, 136••, 137]. In addition, associations with a range of constructs have been shown, including symptom distress and health problems [30, 31, 33, 135, 137]; low well-being [27, 33, 135, 138]; low self-esteem [33]; suicidality [128]; narcissism, borderline symptoms, and aggression

[33]; maladaptive schemas [128, 135]; defensive styles [50]; attachment styles [27, 50]; interpersonal dependency [27]; interpersonal problems, sensitivities, motives, and efficacies [48, 50, 136••]; as well as personality traits [51, 129, 136••].

### Incremental Validity

Research on the incremental validity of the LPFS is limited thus far. The LPFS total score has been shown to predict the presence and severity of PD when controlling for symptom distress or comorbid mental disorders [43, 44], and to predict psychosocial functioning, short-term risk, proposed treatment intensity, and estimated prognosis when controlling for categorical PD diagnoses [40]. Moreover, a recent study suggested that the LPFS total score predicts several specific PDs and life outcomes when controlling for general personality traits [46]. Research on the incremental validity when controlling for maladaptive traits (criterion B) will be summarized below.

### Maladaptive Traits

#### Interrater Reliability

The interrater reliability of expert or informant ratings of maladaptive personality traits according to the AMPD is surprisingly unexplored. The only three studies available suggest that when using the PTRF based on clinical interview material or case vignettes, the interrater reliability of most trait facets may be acceptable (with median ICCs around 0.50), although some facets (e.g., perseveration) consistently yielded unsatisfactory results [41, 131, 132]. This highlights the need for applying structured interviews that are tailored to gathering the relevant information such as the SCID-AMPD Module II [36].

### Internal Consistency and Latent Structure

A review on the PID-5 suggests that trait facet scores show acceptable, and trait domain scores show high internal

consistency across studies, consistent with the greater length of the domain relative to facet scales [110]. Moreover, trait facets appear to be unidimensional, probably with the exception of emotional lability, which has been shown to be more heterogeneous in multiple studies [75, 77, 78, 86, 140]. Two recent meta-analyses [141, 142] covering a large body of research including clinical and nonclinical samples from different countries have confirmed that the latent structure of trait facets is mainly in line with the five-factor model featured in the AMPD [55, 56, 59, 62, 67, 74–79, 86, 140, 143–151]. Note, however, that the loading patterns of some interstitial facets often deviated from the model, suggesting that, for example, restricted affectivity and hostility should be considered as primary indicators of detachment and antagonism instead of negative affectivity [77, 141, 143, 152]. In addition, this research was predominantly based on self-reports, and factor analyses using informant reports or clinician ratings are still scarce and less clear [47•, 67, 148].

### Convergent Validity

Research on the convergent validity of maladaptive traits according to the AMPD is abundant, albeit again mostly based on PID-5 self-reports. Here, we highlight five major lines of research. First, several studies have investigated self–other agreement with regard to trait domains and facets, mostly showing acceptable results with average correlations around 0.40 ([41, 67, 89, 150, 153–158]; see [159], for a recent meta-analysis). Notably, participants tended to rate themselves as higher in maladaptive trait levels than their informants or therapists reported [157, 158].

Second, convergent and discriminant validity with regard to alternative measures of maladaptive traits such as the Dimensional Assessment of Personality Pathology – Basic Questionnaire (DAPP-BQ) [160] or the Computer Adaptive Test of Personality Disorder (CAT-PD) [161] were high, as suggested by strong associations of PID-5 domain scores with conceptually similar trait domains and lower associations with conceptually unrelated trait domains [59, 75, 145, 147, 162–169]. Similar results were reported in studies using broadband clinical measures such as the Minnesota Multiphasic Personality Inventory 2–Restructured Form (MMPI-2-RF) [170] and the PAI [83, 152, 171, 172].

Third, considerable evidence has accumulated in favor of the hypothesis that the PID-5 trait domains can be conceived of as maladaptive variants of general personality traits [77, 84, 144, 149, 152, 165, 168, 173–182]. Specifically, negative affectivity was consistently associated with low emotional stability, detachment with low extraversion, antagonism with low agreeableness, and disinhibition with low conscientiousness. An exception was the association between psychoticism and openness, which was often rather small [77, 152, 165, 173, 175, 177, 180]. This may be explained by considering that

psychoticism is positively related to one aspect of openness (i.e., openness to experience), but negatively related to another aspect (i.e., intellect) ([181]; see also [183, 184]). The overlap between four of the five maladaptive and general trait domains has also been confirmed with regard to their nomological net (i.e., profile of associations with criterion measures) [185].

Fourth, research suggests that the PD categories and symptoms featured in DSM-5 section II can be largely recovered by maladaptive traits [58, 59, 78, 151, 182, 186•, 187–197]. Moreover, studies investigating the convergence between specific PDs in DSM-5 section II and the AMPD, including borderline PD [131, 198–206], obsessive–compulsive PD [89, 207, 208], antisocial PD [204, 209, 210], narcissistic PD [211–213], avoidant PD [214], and schizotypal PD [215] indicated adequate continuity, although some trait facets listed for specific PDs in the AMPD may lack specificity. For example, a recent meta-analysis [216] suggested that most facets are strongly associated with borderline PD (even those which are not listed as defining facets in the manual), and perceptual dysregulation is much stronger associated with borderline PD than risk taking (although the latter is listed as a defining facet in the manual).

Finally, maladaptive traits have been found to be associated with a range of other variables, including age [75]; gender [75, 217]; general symptom distress [66, 77, 84, 172, 218–220]; psychotic disorder [221, 222]; dissociative experiences [223]; bipolar disorder [224]; attention-deficit/hyperactivity disorder [225]; problematic alcohol use [66, 226•]; substance use [140, 227, 228]; self-harm [229]; pathological gambling [230]; internet-gaming disorder [231]; problematic internet use [223]; posttraumatic stress disorder [232, 233•]; physical illness [233•]; disability [57, 234–236]; quality of life [149, 236]; self-esteem [150]; alexithymia [150]; empathy, self-reflection, and insight [150]; maladaptive schemas [237]; interpersonal problems [150, 238, 239]; pathological beliefs [240]; defensive styles [241]; emotion dysregulation [150, 242]; anxiety mindset [205]; impulsivity [227]; aggression [243, 244]; intimate partner violence [245]; hating [246]; sexual aggression and violence [247–249]; hostile femininity [250]; mate poaching strategies [251]; sexual orientation [252]; psychopathy [78, 253]; dark triad traits [254–256]; everyday sadism [250]; spitefulness [257]; criminogenic thinking styles [258]; utilitarian moral judgments [259]; belief in conspiracy theories [260]; cognitive biases [261]; bias and accuracy in deception detection [256]; humor styles and humorous reappraisal of adverse events [262, 263]; maladaptive daydreaming [264]; executive functioning [265]; neural functional connectivity [266]; emotion recognition [267]; motivational responses to other people's affect expressions [268]; intimacy processes within roommate relationships [269]; relationship satisfaction [270, 271]; attachment anxiety and avoidance [150, 223, 272•, 273]; fundamental social motives [274]; daily situation experiences [275]; stigma experiences [276]; and childhood

experiences [218, 277]. Even without a detailed evaluation of their results, these studies demonstrate the breadth of research inspired by the DSM-5 trait model.

### Incremental Validity

Several studies have been conducted demonstrating the incremental validity of maladaptive traits above and beyond DSM-5 section II PDs when predicting treatment planning [278], general PD severity [279], disability [235], social cognition deficits [280], and aggression [244]. Some research focused on the incremental validity of selected trait facets above and beyond specific PDs when predicting external criterion variables [236, 281, 282]. Moreover, two studies indicated that maladaptive traits may have incremental validity for predicting psychosocial impairment [283] or disability and symptoms [284] when controlling for general personality traits and section II PDs.

### Further Issues

Research on maladaptive traits according to the AMPD has addressed a range of further issues. For example, an important question is whether the trait model is comprehensive enough or whether it lacks clinically relevant facets. A recent study addressed this issue by exploring whether the criterion validity of the PID-5 can be incremented by the CAT-PD, which includes additional trait facets not covered in the PID-5 [163]. Results suggest that the CAT-PD indeed provided additional information above and beyond the 25 PID-5 trait facets when predicting clinically relevant criterion variables, suggesting that the DSM-5 trait model may be not fully comprehensive. Other examples are studies showing that individual differences in trait facets are relatively stable across periods of 2 weeks [57, 235], 4 months [285], and more than 1 year [286]. Further issues that have been addressed include measurement invariance or item bias due to age [287, 288], gender [217, 289], and clinical status [290]; response styles in PID-5 self-reports [154, 155, 291, 292]; heritability and familial aggregation of maladaptive traits [39, 289, 293–295]; and perceived likability, impairment, functionality, as well as desire and ability for change of maladaptive traits [68, 158, 296–298].

### Empirical Overlap Between Severity and Maladaptive Traits

An important question with regard to the AMPD is whether impairments in personality functioning (criterion A) and maladaptive personality traits (criterion B) provide distinct or overlapping information (for a conceptual discussion, see [108, 299–302]). From a semantic perspective, criterion A and criterion B share the focus on describing socially

undesirable characteristics [302], and differences seem to be mostly due to theoretical traditions and level of inference [303]. However, if one of the two components lacks incremental validity, one could argue that their separate assessment is uneconomic and the classification system lacks parsimony. Indeed, empirical findings indicate that measures of criterion A (including similar measures of personality functioning) and criterion B are highly correlated [27, 33, 41, 50, 62, 77, 88, 89, 128, 135, 136, 137, 138, 150, 193, 236, 304]. The only study conducting a joint factor analysis of criterion A and criterion B suggested that some criterion A subdomains may load on trait factors (e.g., depth and duration of connections was associated with detachment), and some criterion B facets may load on impairment factors (e.g., callousness was associated with impairments in interpersonal functioning) [47]. With regard to incremental validity, the results are somewhat mixed. While some studies found support for the incremental validity of severity compared to maladaptive traits when predicting some section II PDs [46, 137, 209], personality dynamics in daily life [45, 49], symptom distress [135], substance use and physical health [46], well-being [27, 135], maladaptive schemas [135], and interpersonal dependency [27], the effect sizes were typically rather small, and other studies did not find incremental value for severity ratings when predicting section II PDs [41, 88] and problematic alcohol use [226]. In contrast, the incremental validity of maladaptive traits when controlling for severity seems to be more robust [41, 45, 49, 88, 135, 137, 226].

### Conclusions

Following the release of the DSM-5, researchers have started to assess the reliability, validity, and utility of the AMPD with promising results. However, several questions remain unanswered and should be addressed in future research. First, although the PD chapter in ICD-11 conceptually shares many features with the AMPD, studies are needed that investigate their communalities and differences empirically, and directly compare their clinical utility (for recently published studies addressing this issue, see [38, 128, 129]). Second, the vast majority (i.e., 94%) of studies on the AMPD are based on a monomethod approach (see Fig. 1). This is particularly problematic if the criterion variables are captured by the same method, because common method variance can inflate validity estimates [305]. Such limitations may be overcome by multitrait–multimethod designs, as demonstrated by a recent study on the construct validity of trait facets related to antagonism [306]. Third, the cutoff values for the presence of a PD have been established using cross-sectional data of section II PDs as a criterion [40, 307]. We argue that longitudinal studies are needed to calibrate multiple cutoff values for severity and maladaptive traits based on future life outcomes. Such studies



should also consider nonlinear effects [308] and interaction effects of criterion A and criterion B [220]. In addition, representative samples from the general population should be collected to establish normative values, which will greatly enhance the interpretation of test scores in single-case scenarios. Fourth, researchers should apply the AMPD in intervention studies for identifying severity and maladaptive traits as predictors, moderators, and end points of treatment effects (cf. [309, 310]). Currently, there is only a single study showing that the LPFS-BF can be used as an outcome measure in a 3-month residential treatment program [31]. Fifth, one study has questioned the necessity of utilizing the complex hybrid model of the AMPD for diagnosing PDs, since applying the diagnosis of PD-TS (i.e., meeting the general PD criteria but not the criteria of not any specific type) provides full coverage of all personality pathology [311]. More research is needed into the validity of the specific PDs listed in the AMPD, incorporating the specific impairment criteria [88••] and using mixture modeling to test whether they indeed represent latent categories [312]. Finally, future research should continue pursuing a comprehensive conceptualization of mental disorders that integrates major dimensions of personality and psychopathology [313–318].

**Acknowledgments** We would like to thank Hannah Jungmann, Christine Starke, and Lara Oeltjen for their support in reviewing the published literature.

### Compliance with Ethical Standards

**Conflict of Interest** Johannes Zimmermann, André Kerber, Katharina Rek, and Christopher J. Hopwood each declare no potential conflicts of interest.

Robert F. Krueger is a co-author of the PID-5 and provides consulting services to aid users of the PID-5 in the interpretation of test scores. PID-5 is the intellectual property of the American Psychiatric Association, and Robert F. Krueger does not receive royalties or any other compensation from publication or administration of the inventory.

**Human and Animal Rights and Informed Consent** This article does not contain any studies with human or animal subjects performed by any of the authors.

### References

Papers of particular interest, published recently, have been highlighted as:

- Of importance
- Of major importance

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. 5th ed. Arlington: American Psychiatric Association; 2013.
2. World Health Organization. International classification of diseases ICD-10. 10th ed. Geneva: World Health Organization; 1992.

3. Hengartner MP, Zimmermann J, Wright AGC. Personality pathology. In: Zeigler-Hill V, Shackelford T, editors. The SAGE handbook of personality and individual differences: volume III: applications of personality and individual differences. London: Sage; 2018. p. 3–35. <https://doi.org/10.4135/9781526451248.n1>.
4. Wright AGC, Zimmermann J. At the nexus of science and practice: answering basic clinical questions in personality disorder assessment and diagnosis with quantitative modeling techniques. In: Huprich SK, editor. Personality disorders: toward theoretical and empirical integration in diagnosis and assessment. Washington, DC: American Psychological Association; 2015. p. 109–44. <https://doi.org/10.1037/14549-006>.
5. Widiger TA, Trull TJ. Plate tectonics in the classification of personality disorder: shifting to a dimensional model. *Am Psychol*. 2007;62:71–83. <https://doi.org/10.1037/0003-066X.62.2.71>.
6. Krueger RF. Personality disorders are the vanguard of the post-DSM-5.0 era. *Personal Disord*. 2013;4:355–62. <https://doi.org/10.1037/per0000028>.
7. Tyrer P, Reed GM, Crawford MJ. Classification, assessment, prevalence, and effect of personality disorder. *Lancet*. 2015;385:717–26. [https://doi.org/10.1016/S0140-6736\(14\)61995-4](https://doi.org/10.1016/S0140-6736(14)61995-4).
8. World Health Organization. ICD-11 for mortality and morbidity statistics (ICD-11 MMS). 2018. <https://icd.who.int>.
9. Mulder R, Tyrer P. Diagnosis and classification of personality disorders: novel approaches. *Curr Opin Psychiatr*. 2019;32:27–31. <https://doi.org/10.1097/YCO.0000000000000461>.
10. Zimmermann J. Paradigmenwechsel in der Klassifikation von Persönlichkeitsstörungen: Die neuen Modelle in DSM-5 und ICD-11. *Psychotherapie im Dialog*. 2014;15:e1–e10. <https://doi.org/10.1055/s-0034-1390426>.
11. Pincus AL. Some comments on nomology, diagnostic process, and narcissistic personality disorder in the DSM-5 proposal for personality and personality disorders. *Personal Disord*. 2011;2:41–53. <https://doi.org/10.1037/a0021191>.
12. Skodol AE, Morey LC, Bender DS, Oldham JM. The ironic fate of the personality disorders in DSM-5. *Personal Disord*. 2013;4:342–9. <https://doi.org/10.1037/per0000029>.
13. Zachar P, Krueger RF, Kendler KS. Personality disorder in DSM-5: an oral history. *Psychol Med*. 2016;46:1–10. <https://doi.org/10.1017/S0033291715001543>.
14. Skodol AE. Personality disorders in DSM-5. *Annu Rev Clin Psychol*. 2012;8:317–44. <https://doi.org/10.1146/annurev-clinpsy-032511-143131>.
15. Bender DS, Morey LC, Skodol AE. Toward a model for assessing level of personality functioning in DSM-5, part I: a review of theory and methods. *J Pers Assess*. 2011;93:332–46. <https://doi.org/10.1080/00223891.2011.583808>.
16. Krueger RF, Derringer J, Markon KE, Watson D, Skodol AE. Initial construction of a maladaptive personality trait model and inventory for DSM-5. *Psychol Med*. 2012;42:1879–90. <https://doi.org/10.1017/S0033291711002674>.
17. Tyrer P, Crawford M, Mulder RT, Blashfield RK, Farnam A, Fossati A, et al. The rationale for the reclassification of personality disorder in the 11<sup>th</sup> revision of the International Classification of Diseases (ICD-11). *Personal Ment Health*. 2011;5:246–59. <https://doi.org/10.1002/pmh.190>.
18. Reed GM. Progress in developing a classification of personality disorders for ICD-11. *World Psychiatry*. 2018;17:227–9. <https://doi.org/10.1002/wps.20533>.
19. Herpertz SC. Neue Wege der Klassifikation von Persönlichkeitsstörungen in ICD-11. *Fortschr Neurol Psychiatr*. 2018;86:150–5. <https://doi.org/10.1055/a-0576-7149>.
20. Tyrer P, Mulder R, Kim Y-R, Crawford MJ. The development of the ICD-11 classification of personality disorders: an amalgam of science, pragmatism, and politics. *Annu Rev Clin Psychol*. 2019. <https://doi.org/10.1146/annurev-clinpsy-050718-095736>.

- Extensive review on the process of the development the dimensional ICD-11 model of personality disorders up to the contemporary version including the derivation of the ICD-11 trait domains and the borderline controversy.**
21. Herpertz SC, Huprich SK, Bohus M, Chanen A, Goodman M, Mehlum L, et al. The challenge of transforming the diagnostic system of personality disorders. *J Personal Disord.* 2017;31:577–89. [https://doi.org/10.1521/pedi\\_2017\\_31\\_338](https://doi.org/10.1521/pedi_2017_31_338).
  22. Hopwood CJ, Kotov R, Krueger RF, Watson D, Widiger TA, Althoff RR, et al. The time has come for dimensional personality disorder diagnosis. *Personal Ment Health.* 2018;12:82–6. <https://doi.org/10.1002/pmh.1408>.
  23. Hopwood CJ, Krueger RF, Watson D, Widiger TA, Althoff RR, Ansell EB, et al. Commentary on “The challenge of transforming the diagnostic system of personality disorders”. *J Personal Disord in press.* [https://doi.org/10.1521/pedi\\_2019\\_33\\_00](https://doi.org/10.1521/pedi_2019_33_00).
  24. World Health Organization. Eleventh revision of the International Classification of Diseases. Report by the Director-General. Executive Board 144<sup>th</sup> session, Provisional agenda item 5.9. 2018. [http://apps.who.int/gb/ebwha/pdf\\_files/EB144/B144\\_22-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/EB144/B144_22-en.pdf). Accessed 11 May 2019.
  25. Bach B, First MB. Application of the ICD-11 classification of personality disorders. *BMC Psychiatry.* 2018;18:351. <https://doi.org/10.1186/s12888-018-1908-3>.
  26. Thylstrup B, Simonsen S, Nemery C, Simonsen E, Noll JF, Myatt MW, et al. Assessment of personality-related levels of functioning: a pilot study of clinical assessment of the DSM-5 level of personality functioning based on a semi-structured interview. *BMC Psychiatry.* 2016;16:298. <https://doi.org/10.1186/s12888-016-1011-6>.
  27. Huprich SK, Nelson SM, Meehan KB, Siefert CJ, Haggerty G, Sexton J, et al. Introduction of the DSM-5 levels of Personality Functioning Questionnaire. *Personal Disord.* 2018;9:553–63. <https://doi.org/10.1037/per0000264>.
  28. Siefert CJ, Sexton J, Meehan K, Nelson S, Haggerty G, Dauphin B, et al. Development of a short form for the DSM-5 levels of personality functioning questionnaire. *J Pers Assess in press.* <https://doi.org/10.1080/00223891.2019.1594842>.
  29. Morey LC. Development and initial evaluation of a self-report form of the DSM-5 Level of Personality Functioning Scale. *Psychol Assess.* 2017;29:1302–8. <https://doi.org/10.1037/pas0000450>.
  30. Hutsebaut J, Feenstra DJ, Kamphuis JH. Development and preliminary psychometric evaluation of a brief self-report questionnaire for the assessment of the DSM-5 Level of Personality Functioning Scale: the LPFS Brief Form (LPFS-BF). *Personal Disord.* 2016;7:192–7. <https://doi.org/10.1037/per0000159>.
  31. Weekers LC, Hutsebaut J, Kamphuis JH. The Level of Personality Functioning Scale-Brief Form 2.0: update of a brief instrument for assessing level of personality functioning. *Personal Ment Health.* 2019;13:3–14. <https://doi.org/10.1002/pmh.1434>.
  32. Goth K, Birkhölzer M, Schmeck K. Assessment of personality functioning in adolescents with the LoPF-Q 12-18 self-report questionnaire. *J Pers Assess.* 2018;100:680–90. <https://doi.org/10.1080/00223891.2018.1489258>.
  33. Gamache D, Savard C, Leclerc P, Côté A. Introducing a short self-report for the assessment of DSM-5 level of personality functioning for personality disorders: the Self and Interpersonal Functioning Scale. *Personal Disord in press.* <https://doi.org/10.1037/per0000335>.
  34. Hutsebaut J, Kamphuis JH, Feenstra DJ, Weekers LC, de Saeger H. Assessing DSM-5-oriented level of personality functioning: development and psychometric evaluation of the semi-structured interview for personality functioning DSM-5 (STIP-5.1). *Personal Disord.* 2017;8:94–101. <https://doi.org/10.1037/per0000197>.
  35. Bender DS, Skodol AE, First MB, Oldham JM. Module I: structured clinical interview for the level of personality functioning scale. In: First MB, Skodol AE, Bender DS, Oldham JM, editors. Structured clinical interview for the DSM-5 alternative model for personality disorders (SCID-AMPD). Arlington: American Psychiatric Association Publishing; 2018.
  36. Skodol AE, First MB, Bender DS, Oldham JM. Module II: structured clinical interview for personality traits. In: First MB, Skodol AE, Bender DS, Oldham JM, editors. Structured clinical interview for the DSM-5 alternative model for personality disorders (SCID-AMPD). Arlington: American Psychiatric Association Publishing; 2018.
  37. Olajide K, Munjiza J, Moran P, O’Connell L, Newton-Howes G, Bassett P, et al. Development and psychometric properties of the Standardized Assessment of Severity of Personality Disorder (SASPD). *J Personal Disord.* 2018;32:44–56. [https://doi.org/10.1521/pedi\\_2017\\_31\\_285](https://doi.org/10.1521/pedi_2017_31_285).
  38. Oltmanns JR, Widiger TA. A self-report measure for the ICD-11 dimensional trait model proposal: the personality inventory for ICD-11. *Psychol Assess.* 2018;30:154–69. <https://doi.org/10.1037/pas0000459>.
  39. Reichborn-Kjennerud T, Krueger RF, Ystrom E, Torvik FA, Rosenström TH, Aggen SH, et al. Do DSM-5 section II personality disorders and section III personality trait domains reflect the same genetic and environmental risk factors? *Psychol Med.* 2017;47:2205–15. <https://doi.org/10.1017/S0033291717000824>.
  40. Morey LC, Bender DS, Skodol AE. Validating the proposed Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition, severity indicator for personality disorder. *J Nerv Ment Dis.* 2013;201:729–35. <https://doi.org/10.1097/NMD.0b013e3182a20ea8>.
  41. Few LR, Miller JD, Rothbaum AO, Meller S, Maples J, Terry DP, et al. Examination of the section III DSM-5 diagnostic system for personality disorders in an outpatient clinical sample. *J Abnorm Psychol.* 2013;122:1057–69. <https://doi.org/10.1037/a0034878>.
  42. Dereboy F, Dereboy Ç, Eskin M. Validation of the DSM-5 alternative model personality disorder diagnoses in Turkey, part 1: LEAD validity and reliability of the personality functioning ratings. *J Pers Assess.* 2018;100:603–11. <https://doi.org/10.1080/00223891.2018.1423989>.
  43. Zimmermann J, Benecke C, Bender DS, Skodol AE, Schauenburg H, Cierpka M, et al. Assessing DSM-5 level of personality functioning from videotaped clinical interviews: a pilot study with untrained and clinically inexperienced students. *J Pers Assess.* 2014;96:397–409. <https://doi.org/10.1080/00223891.2013.852563>.
  44. Preti E, Di Pierro R, Costantini G, Benzi IMA, de Panfilis C, Madeddu F. Using the structured interview of personality organization for DSM-5 level of personality functioning rating performed by inexperienced raters. *J Pers Assess.* 2018;100:621–9. <https://doi.org/10.1080/00223891.2018.1448985>.
  45. Roche MJ. Examining the alternative model for personality disorder in daily life: evidence for incremental validity. *Personal Disord.* 2018;9:574–83. <https://doi.org/10.1037/per0000295>.
  46. Cruitt PJ, Boudreaux MJ, King HR, Oltmanns JR, Oltmanns TF. Examining criterion A: DSM-5 level of personality functioning as assessed through life story interviews. *Personal Disord in press.* <https://doi.org/10.1037/per0000321>.
  47. Zimmermann J, Böhnke JR, Eschstruth R, Mathews A, Wenzel K, Leising D. The latent structure of personality functioning: investigating criterion A from the alternative model for personality disorders in DSM-5. *J Abnorm Psychol.* 2015;124:532–48. <https://doi.org/10.1037/abn0000059>. **This study investigated the latent structure of DSM-5 AMPD criterion A and B using other-ratings by 515 laypersons and 145 therapists. Results indicated that most criterion A subdomains are**

- unidimensional and that the structure of subdomains is largely consistent with two strongly correlated factors of self- and interpersonal functioning. However, a joint analysis with criterion B trait facets suggested that the distinction between criteria A and B may be somewhat blurry.**
48. Dowgwillo EA, Roche MJ, Pincus AL. Examining the interpersonal nature of criterion A of the DSM-5 section III alternative model for personality disorders using bootstrapped confidence intervals for the interpersonal circumplex. *J Pers Assess.* 2018;100:581–92. <https://doi.org/10.1080/00223891.2018.1464016>.
  49. Roche MJ, Jacobson NC, Pincus AL. Using repeated daily assessments to uncover oscillating patterns and temporally-dynamic triggers in structures of psychopathology: applications to the DSM-5 alternative model of personality disorders. *J Abnorm Psychol.* 2016;125:1090–102. <https://doi.org/10.1037/abn0000177>.
  50. Roche MJ, Jacobson NC, Phillips JJ. Expanding the validity of the Level of Personality Functioning Scale observer report and self-report versions across psychodynamic and interpersonal paradigms. *J Pers Assess.* 2018;100:571–80. <https://doi.org/10.1080/00223891.2018.1475394>.
  51. Morey LC. Application of the DSM-5 level of personality functioning scale by lay raters. *J Personal Disord.* 2018;32:709–20. [https://doi.org/10.1521/pedi\\_2017\\_31\\_305](https://doi.org/10.1521/pedi_2017_31_305).
  52. Kim Y-R, Blashfield R, Tyrer P, Hwang S-T, Lee H-S. Field trial of a putative research algorithm for diagnosing ICD-11 personality disorders in psychiatric patients: 1. Severity of personality disturbance. *Personal Ment Health.* 2014;8:67–78. <https://doi.org/10.1002/pmh.1248>.
  53. Watters CA, Sellbom M, Bagby RM. Comparing two domain scoring methods for the Personality Inventory for DSM-5. *Psychol Assess* in press. <https://doi.org/10.1037/pas0000739>.
  54. Thimm JC, Jordan S, Bach B. The Personality Inventory for DSM-5 Short Form (PID-5-SF): psychometric properties and association with Big Five traits and pathological beliefs in a Norwegian population. *BMC Psychol.* 2016;4:61. <https://doi.org/10.1186/s40359-016-0169-5>.
  55. Maples JL, Carter NT, Few LR, Crego C, Gore WL, Samuel DB, et al. Testing whether the DSM-5 personality disorder trait model can be measured with a reduced set of items: an item response theory investigation of the Personality Inventory for DSM-5. *Psychol Assess.* 2015;27:1195–210. <https://doi.org/10.1037/pas0000120>.
  56. Bach B, Maples-Keller JL, Bo S, Simonsen E. The alternative DSM-5 personality disorder traits criterion: a comparative examination of three self-report forms in a Danish population. *Personal Disord.* 2016;7:124–35. <https://doi.org/10.1037/per0000162>.
  57. Díaz-Batanero C, Ramírez-López J, Domínguez-Salas S, Fernández-Calderón F, Lozano ÓM. Personality Inventory for DSM-5-Short Form (PID-5-SF): reliability, factorial structure, and relationship with functional impairment in dual diagnosis patients. *Assessment* in press. <https://doi.org/10.1177/1073191117739980>.
  58. Somma A, Krueger RF, Markon KE, Borroni S, Fossati A. Item response theory analyses, factor structure, and external correlates of the Italian translation of the personality inventory for DSM-5 short form in community-dwelling adults and clinical adults. *Assessment* in press. <https://doi.org/10.1177/1073191118781006>.
  59. Aluja A, García LF, Cuevas L, Lucas I. Dimensional pathological personality predicting personality disorders: comparison of the DAPP-BQ and PID-5 shortened versions in a Spanish community sample. *J Psychopathol Behav Assess.* 2019;41:160–73. <https://doi.org/10.1007/s10862-018-9706-2>.
  60. Fossati A, Somma A, Borroni S, Markon KE, Krueger RF. The Personality Inventory for DSM-5 Brief Form: evidence for reliability and construct validity in a sample of community-dwelling Italian adolescents. *Assessment.* 2017;24:615–31. <https://doi.org/10.1177/1073191115621793>.
  61. Anderson JL, Sellbom M, Salekin RT. Utility of the Personality Inventory for DSM-5-Brief Form (PID-5-BF) in the measurement of maladaptive personality and psychopathology. *Assessment.* 2018;25:596–607. <https://doi.org/10.1177/1073191116676889>.
  62. Debast I, Rossi G, van Alphen SPJ. Construct validity of the DSM-5 section III maladaptive trait domains in older adults. *J Personal Disord.* 2017;31:671–88. [https://doi.org/10.1521/pedi\\_2017\\_31\\_274](https://doi.org/10.1521/pedi_2017_31_274).
  63. Góngora VC, Castro Solano A. Pathological personality traits (DSM-5), risk factors, and mental health. *SAGE Open.* 2017;7:215824401772512. <https://doi.org/10.1177/2158244017725129>.
  64. Kajonius PJ. The short personality inventory for DSM-5 and its conjoined structure with the common five-factor model. *Int J Test.* 2017;17:372–84. <https://doi.org/10.1080/15305058.2017.1309421>.
  65. Porcerelli JH, Hopwood CJ, Jones JR. Convergent and discriminant validity of Personality Inventory for DSM-5-BF in a primary care sample. *J Personal Disord* in press. [https://doi.org/10.1521/pedi\\_2018\\_32\\_372](https://doi.org/10.1521/pedi_2018_32_372).
  66. Yalch MM, Schroder HS, Dawood S. Validity of a brief measure of DSM-5 maladaptive personality traits in a black college sample. In: Truslow LI, RJ M, editors. *Personality disorders: what we know and future directions for research.* New York: Nova Science Publishers; 2019. p. 107–24.
  67. Markon KE, Quilty LC, Bagby RM, Krueger RF. The development and psychometric properties of an informant-report form of the Personality Inventory for DSM-5 (PID-5). *Assessment.* 2013;20:370–83. <https://doi.org/10.1177/1073191113486513>.
  68. Miller JD, Sleep CE, Lamkin J, Vize C, Campbell WK, Lynam DR. Personality disorder traits: perceptions of likability, impairment, and ability to change as correlates and moderators of desired level. *Personal Disord.* 2018;9:478–83. <https://doi.org/10.1037/per0000263>.
  69. Bach B, Sellbom M, Kongerslev M, Simonsen E, Krueger RF, Mulder R. Deriving ICD-11 personality disorder domains from DSM-5 traits: initial attempt to harmonize two diagnostic systems. *Acta Psychiatr Scand.* 2017;136:108–17. <https://doi.org/10.1111/acps.12748>.
  70. Sellbom M, Solomon-Krakus S, Bach B, Bagby RM. Validation of Personality Inventory for DSM-5 (PID-5) algorithms to assess ICD-11 personality trait domains in a psychiatric sample. *Psychol Assess* in press. <https://doi.org/10.1037/pas0000746>.
  71. Al-Attayah AA, Megreya AM, Alrashidi M, Dominguez-Lara SA, Al-Sheerawi A. The psychometric properties of an Arabic version of the Personality Inventory for DSM-5 (PID-5) across three Arabic-speaking Middle Eastern countries. *Int J Cult Ment Health.* 2016;10:197–205. <https://doi.org/10.1080/17542863.2017.1290125>.
  72. Lugo V, de OSES, Hessel CR, Monteiro RT, Pasche NL, Pavan G, et al. Evaluation of DSM-5 and ICD-11 personality traits using the Personality Inventory for DSM-5 (PID-5) in a Brazilian sample of psychiatric inpatients. *Personal Ment Health.* 2019;13:24–39. <https://doi.org/10.1002/pmh.1436>.
  73. Barchi-Ferreira AM, Loureiro SR, Torres AR, da Silva TDA, Moreno AL, DeSousa DA, et al. Personality Inventory for DSM-5 (PID-5): cross-cultural adaptation and content validity in the Brazilian context. *Trends Psychiatry Psychother.* 2019. <https://doi.org/10.1590/2237-6089-2018-0098>.
  74. Riegel KD, Ksinan AJ, Samankova D, Preiss M, Harsa P, Krueger RF. Unidimensionality of the personality inventory for DSM-5 facets: evidence from two Czech-speaking samples. *Personal Ment Health* in press. <https://doi.org/10.1002/pmh.1423>.
  75. Bastiaens T, Claes L, Smits D, de CB, de FF, Rossi G, et al. The construct validity of the Dutch personality inventory for DSM-5



- Personality Disorders (PID-5) in a clinical sample. *Assessment*. 2016;23:42–51. <https://doi.org/10.1177/1073191115575069>.
76. Roskam I, Galdiolo S, Hansenne M, Massoudi K, Rossier J, Gicquel L, et al. The psychometric properties of the French version of the Personality Inventory for DSM-5. *PLoS One*. 2015;10:e0133413. <https://doi.org/10.1371/journal.pone.0133413>.
77. Zimmermann J, Altenstein D, Krieger T, Grosse Holtforth M, Pretsch J, Alexopoulos J, et al. The structure and correlates of self-reported DSM-5 maladaptive personality traits: findings from two German-speaking samples. *J Personal Disord*. 2014;28:518–40. [https://doi.org/10.1521/pedi\\_2014\\_28\\_130](https://doi.org/10.1521/pedi_2014_28_130).
78. Fossati A, Krueger RF, Markon KE, Borroni S, Maffei C. Reliability and validity of the personality inventory for DSM-5 (PID-5): predicting DSM-IV personality disorders and psychopathy in community-dwelling Italian adults. *Assessment*. 2013;20:689–708. <https://doi.org/10.1177/1073191113504984>.
79. Thimm JC, Jordan S, Bach B. Hierarchical structure and cross-cultural measurement invariance of the Norwegian version of the Personality Inventory for DSM-5. *J Pers Assess*. 2017;99:204–10. <https://doi.org/10.1080/00223891.2016.1223682>.
80. Amini M, Pourshahbaz A, Mohammadkhani P, Khodaie A, Lotfi M. The investigation of construct validity of Diagnostic and Statistical Manual of Mental Disorder-5 personality traits on Iranian sample with antisocial and borderline personality disorders. *Int J Prev Med*. 2014;5:1601–7.
81. Lotfi M, Bach B, Amini M, Simonsen E. Structure of DSM-5 and ICD-11 personality domains in Iranian community sample. *Personal Ment Health*. 2018. <https://doi.org/10.1002/pmh.1409>.
82. Soraya S, Kamalzadeh L, Nayeri V, Bayat E, Alavi K, Shariat SV. Factor structure of Personality Inventory for DSM-5 (PID-5) in an Iranian sample. *IJPCP*. 2017;22:308–17. <https://doi.org/10.18869/nirp.ijpcp.22.4.308>.
83. Rowiński T, Kowalska-Dąbrowska M, Strus WS, Ciecuch J, Czuma I, Żechowski C, et al. Measurement of pathological personality traits according to section III of the DSM-5: a Polish adaptation of PID-5. Part II—empirical results. *Psychiatr Pol*. 2019;53:23–48. <https://doi.org/10.12740/PP/OnlineFirst/86478>.
84. Pires R, Sousa Ferreira A, Guedes D. The psychometric properties of the Portuguese version of the Personality Inventory for DSM-5. *Scand J Psychol*. 2017;58:468–75. <https://doi.org/10.1111/sjop.12383>.
85. Lozovanu S, Moldovanu I, Vovc V, Ganenco A, Blajevski A, Besleaga T. Translation and validation of the Russian version of the Personality Inventory for DSM-5 (PID-5). *Moldovan Medical Journal*. 2019;62:3–6. <https://doi.org/10.5281/ZENODO.3233900>.
86. Gutierrez F, Aluja A, Peri JM, Calvo N, Ferrer M, Bailles E, et al. Psychometric properties of the Spanish PID-5 in a clinical and a community sample. *Assessment*. 2017;24:326–36. <https://doi.org/10.1177/1073191115606518>.
87. Liggett J, Carmichael KLC, Smith A, Sellbom M. Validation of self-report impairment measures for section III obsessive-compulsive and avoidant personality disorders. *J Pers Assess*. 2017;99:1–14. <https://doi.org/10.1080/00223891.2016.1185613>.
88. Anderson JL, Sellbom M. Evaluating the DSM-5 Section III personality disorder impairment criteria. *Personal Disord*. 2018;9:51–61. <https://doi.org/10.1037/per0000217>. **The authors developed disorder-specific impairment scales for six specific PDs as described in the DSM-5 AMPD. The findings suggest a lack of utility in measuring disorder-specific impairment as opposed to a more broadly evaluation of impairments in self- and interpersonal functioning.**
89. Liggett J, Sellbom M. Examining the DSM-5 alternative model of personality disorders operationalization of obsessive-compulsive personality disorder in a mental health sample. *Personal Disord*. 2018;9:397–407. <https://doi.org/10.1037/per0000285>.
90. Morey LC. Professional manual for the Personality Assessment Inventory. Odessa: Psychological Assessment Resources; 1991.
91. Busch AJ, Morey LC, Hopwood CJ. Exploring the assessment of the DSM-5 alternative model for personality disorders with the personality assessment inventory. *J Pers Assess*. 2017;99:211–8. <https://doi.org/10.1080/00223891.2016.1217872>.
92. Ruiz MA, Hopwood CJ, Edens JF, Morey LC, Cox J. Initial development of pathological personality trait domain measures using the Personality Assessment Inventory (PAI). *Personal Disord*. 2018;9:564–73. <https://doi.org/10.1037/per0000286>.
93. Wright AGC, Simms LJ. Stability and fluctuation of personality disorder features in daily life. *J Abnorm Psychol*. 2016;125:641–56. <https://doi.org/10.1037/abn0000169>.
94. Keeley JW, Webb C, Peterson D, Roussin L, Flanagan EH. Development of a response inconsistency scale for the Personality Inventory for DSM-5. *J Pers Assess*. 2016;98:351–9. <https://doi.org/10.1080/00223891.2016.1158719>.
95. Bagby RM, Sellbom M. The validity and clinical utility of the Personality Inventory for DSM-5 response inconsistency scale. *J Pers Assess*. 2018;100:398–405. <https://doi.org/10.1080/00223891.2017.1420659>.
96. Somma A, Borroni S, Kelley SE, Edens JF, Fossati A. Further evidence for the validity of a response inconsistency scale for the Personality Inventory for DSM-5 in Italian community-dwelling adolescents, community-dwelling adults, and clinical adults. *Psychol Assess*. 2018;30:929–40. <https://doi.org/10.1037/pas0000547>.
97. Sellbom M, Dhillon S, Bagby RM. Development and validation of an overreporting scale for the Personality Inventory for DSM-5 (PID-5). *Psychol Assess*. 2017. <https://doi.org/10.1037/pas0000507>.
98. Williams MM, Rogers R, Sharf AJ, Ross CA. Faking good: an investigation of social desirability and defensiveness in an inpatient sample with personality disorder traits. *J Pers Assess*. 2019;101:253–63. <https://doi.org/10.1080/00223891.2018.1455691>.
99. Guenole N, Brown AA, Cooper AJ. Forced-choice assessment of work-related maladaptive personality traits: preliminary evidence from an application of Thurstonian item response modeling. *Assessment*. 2018;25:513–26. <https://doi.org/10.1177/1073191116641181>.
100. Morey LC, Benson KT, Busch AJ, Skodol AE. Personality Disorders in DSM-5: emerging research on the alternative model. *Curr Psychiatry Rep*. 2015. <https://doi.org/10.1007/s11920-015-0558-0>.
101. Krueger RF, Hopwood CJ, Wright AGC, Markon KE. DSM-5 and the path toward empirically based and clinically useful conceptualization of personality and psychopathology. *Clin Psychol*. 2014;21:245–61. <https://doi.org/10.1111/cpsp.12073>.
102. Waugh MH, Hopwood CJ, Krueger RF, Morey LC, Pincus AL, Wright AGC. Psychological assessment with the DSM-5 alternative model for personality disorders: tradition and innovation. *Prof Psychol Res Pr*. 2017;48:79–89. <https://doi.org/10.1037/pro0000071>. **In this review, the authors introduce the DSM-5 AMPD to practitioners, highlight its roots in established paradigms of personality assessment, briefly review clinical utility and validity research, and demonstrate application via a case example. They particularly address the clinical use of the AMPD.**
103. Zachar P, First MB. Transitioning to a dimensional model of personality disorder in DSM 5.1 and beyond. *Curr Opin Psychiatr*. 2015;28:66–72. <https://doi.org/10.1097/YCO.0000000000000115>.
104. Hopwood CJ, Mulay AL, Waugh MH, editors. The DSM-5 alternative model for personality disorders: integrating multiple paradigms of personality assessment. New York: Routledge; 2019.

105. Bastiaens T, Claes L, Greiff S. Dimensional assessment of personality disorders. *Eur J Psychol Assess.* 2018;34:291–4. <https://doi.org/10.1027/1015-5759/a000506>.
106. Pincus AL. An interpersonal perspective on criterion A of the DSM-5 alternative model for personality disorders. *Curr Opin Psychol.* 2018;21:11–7. <https://doi.org/10.1016/j.copsyc.2017.08.035>. **The author illustrates how the impairments in self and interpersonal functioning according to DSM-5 AMPD criterion A align with agency and communion respectively, the “core meta-constructs of interpersonal personality theory”. He underlines the interpersonal nature of personality disorders and how this could be operationalized by linking Criterion A with the interpersonal paradigm.**
107. Herpertz SC, Bertsch K, Jeung H. Neurobiology of criterion A: self and interpersonal personality functioning. *Curr Opin Psychol.* 2017;21:23–7. <https://doi.org/10.1016/j.copsyc.2017.08.032>.
108. Widiger TA, Bach B, Chmielewski M, Clark LA, DeYoung C, Hopwood CJ, et al. Criterion A of the AMPD in HiTOP. *J Pers Assess* in press. <https://doi.org/10.1080/00223891.2018.1465431>. **The authors briefly introduce the current status of the Hierarchical Taxonomy of Psychopathology (HiTOP) model as well as the good alignment of DSM-5 AMPD criterion B in their model, followed by an extensive review of research that give indications if and how criterion A could be aligned with their model.**
109. Bender DS, Zimmermann J, Huprich SK. Introduction to the special series on the personality functioning component of the alternative DSM-5 model for personality disorders. *J Pers Assess.* 2018;100:565–70. <https://doi.org/10.1080/00223891.2018.1491856>.
110. Al-Dajani N, Gralnick TM, Bagby RM. A psychometric review of the Personality Inventory for DSM-5 (PID-5): current status and future directions. *J Pers Assess.* 2016;98:62–81. <https://doi.org/10.1080/00223891.2015.1107572>.
111. Krueger RF, Markon KE. The role of the DSM-5 personality trait model in moving toward a quantitative and empirically based approach to classifying personality and psychopathology. *Annu Rev Clin Psychol.* 2014;10:477–501. <https://doi.org/10.1146/annurev-clinpsy-032813-153732>.
112. Miller JD, Sleep C, Lynam DR. DSM-5 alternative model of personality disorder: testing the trait perspective captured in criterion B. *Curr Opin Psychol.* 2017;21:50–4. <https://doi.org/10.1016/j.copsyc.2017.09.012>. **This paper addresses the associations of DSM-5 AMPD criterion B with the Big Five personality trait model as well as “fears regarding the loss of the important and useful construct” of borderline PD. The authors conclude that there is more than enough empirical evidence for a “full and complete transition” from categorical constructs to a dimensional trait model in the near future.**
113. Bach B, Markon K, Simonsen E, Krueger RF. Clinical utility of the DSM-5 alternative model of personality disorders: six cases from practice. *J Psychiatr Pract.* 2015;21:3–25. <https://doi.org/10.1097/01.pra.0000460618.02805.ef>. **Clear and crisp introduction to the DSM-5 AMPD including descriptions of criterion A impairment and criterion B traits. Applicability of the AMPD is demonstrated by the illustration of six cases taken from clinical practice.**
114. Pincus AL, Dowgwillo EA, Greenberg LS. Three cases of narcissistic personality disorder through the lens of the DSM-5 alternative model for personality disorders. *Pract Innov.* 2016;1:164–77. <https://doi.org/10.1037/pri0000025>. **This paper gives a brief but very good introduction to the DSM-5 AMPD aligned with three cases from community mental health outpatient clinic. The authors include case vignettes, summaries of the course of the treatment and illustrate the utility of the AMPD**
- Narcissistic PD diagnosis in capturing the array of symptoms and functioning that the three different cases show.**
115. Zimmermann J, Benecke C, Bender DS, Skodol AE, Krueger RF, Leising D. Persönlichkeitsdiagnostik im DSM-5. *Psychotherapeut.* 2013;58:455–65. <https://doi.org/10.1007/s00278-013-1009-1>.
116. Zimmermann J, Brakemeier E-L, Benecke C. Alternatives DSM-5-Modell zur Klassifikation von Persönlichkeitsstörungen. *Psychotherapeut.* 2015;60:269–79. <https://doi.org/10.1007/s00278-015-0033-8>.
117. Schmeck K, Schlüter-Müller S, Foelsch PA, Doering S. The role of identity in the DSM-5 classification of personality disorders. *Child Adolesc Psychiatry Ment Health.* 2013;7:27. <https://doi.org/10.1186/1753-2000-7-27>.
118. Skodol AE, Morey LC, Bender DS, Oldham JM. The alternative DSM-5 model for personality disorders: a clinical application. *Am J Psychiatry.* 2015;172:606–13. <https://doi.org/10.1176/appi.ajp.2015.14101220>.
119. Hopwood CJ. A framework for treating DSM-5 alternative model for personality disorder features. *Personal Ment Health.* 2018;12:107–25. <https://doi.org/10.1002/pmh.1414>.
120. Bach B, Bernstein DP. Schema therapy conceptualization of personality functioning and traits in ICD-11 and DSM-5. *Curr Opin Psychiatr.* 2019;32:38–49. <https://doi.org/10.1097/YCO.0000000000000464>.
121. Morey LC, Skodol AE, Oldham JM. Clinician judgments of clinical utility: a comparison of DSM-IV-TR personality disorders and the alternative model for DSM-5 personality disorders. *J Abnorm Psychol.* 2014;123:398–405. <https://doi.org/10.1037/a0036481>.
122. Nelson SM, Huprich SK, Shankar S, Sohnleitner A, Paggot AV. A quantitative and qualitative evaluation of trainee opinions of four methods of personality disorder diagnosis. *Personal Disord.* 2017;8:217–27. <https://doi.org/10.1037/per0000227>.
123. Lengel GJ, Mullins-Sweatt SN. The importance and acceptability of general and maladaptive personality trait computerized assessment feedback. *Psychol Assess.* 2017;29:1–12. <https://doi.org/10.1037/pas0000321>.
124. Tyrer P, Crawford M, Sanatnia R, Tyrer H, Cooper S, Muller-Pollard C, et al. Preliminary studies of the ICD-11 classification of personality disorder in practice. *Personal Ment Health.* 2014;8:254–63. <https://doi.org/10.1002/pmh.1275>.
125. Mulder RT, Horwood J, Tyrer P, Carter J, Joyce PR. Validating the proposed ICD-11 domains. *Personal Ment Health.* 2016;10:84–95. <https://doi.org/10.1002/pmh.1336>.
126. Kim Y-R, Tyrer P, Lee H-S, Kim S-G, Connan F, Kinnaird E, et al. Schedule for personality assessment from notes and documents (SPAN-DOC): preliminary validation, links to the ICD-11 classification of personality disorder, and use in eating disorders. *Personal Ment Health.* 2016;10:106–17. <https://doi.org/10.1002/pmh.1335>.
127. Kim Y-R, Tyrer P, Lee H-S, Kim S-G, Hwang S-T, Lee GY, et al. Preliminary field trial of a putative research algorithm for diagnosing ICD-11 personality disorders in psychiatric patients: 2. Proposed trait domains. *Personal Ment Health.* 2015;9:298–307. <https://doi.org/10.1002/pmh.1305>.
128. Bach B, Anderson JL. Patient-reported ICD-11 personality disorder severity and DSM-5 level of personality functioning. *J Personal Disord* in press. [https://doi.org/10.1521/pedi\\_2018\\_32\\_393](https://doi.org/10.1521/pedi_2018_32_393).
129. Oltmanns JR, Widiger TA. Evaluating the assessment of the ICD-11 personality disorder diagnostic system. *Psychol Assess.* 2019;31:674–84. <https://doi.org/10.1037/pas0000693>.
130. Hansen SJ, Christensen S, Kongerslev MT, First MB, Widiger TA, Simonsen E, et al. Mental health professionals’ perceived clinical utility of the ICD-10 vs. ICD-11 classification of personality



- disorders. *Personal Ment Health*. 2019;13:84–95. <https://doi.org/10.1002/pmh.1442>.
131. Morey LC. Interdiagnostic reliability of the DSM-5 section II and section III alternative model criteria for borderline personality disorder. *J Personal Disord* in press. [https://doi.org/10.1521/pedi\\_2019\\_33\\_362](https://doi.org/10.1521/pedi_2019_33_362).
132. Garcia DJ, Skadberg RM, Schmidt M, Bierma S, Shorter RL, Waugh MH. It's not that difficult: an interrater reliability study of the DSM-5 section III alternative model for personality disorders. *J Pers Assess*. 2018;100:612–20. <https://doi.org/10.1080/00223891.2018.1428982>.
133. Kampe L, Zimmermann J, Bender D, Caligor E, Borowski A-L, Ehrental JC, et al. Comparison of the structured DSM-5 clinical interview for the level of personality functioning scale with the structured interview of personality organization. *J Pers Assess*. 2018;100:642–9. <https://doi.org/10.1080/00223891.2018.1489257>.
134. Buer Christensen T, Paap MCS, Arnesen M, Koritzinsky K, Nysaeter T-E, Eikenaes I, et al. Interrater reliability of the structured clinical interview for the DSM-5 alternative model of personality disorders module I: level of personality functioning scale. *J Pers Assess*. 2018;100:630–41. <https://doi.org/10.1080/00223891.2018.1483377>.
135. Bach B, Hutsebaut J. Level of Personality Functioning Scale-Brief Form 2.0: utility in capturing personality problems in psychiatric outpatients and incarcerated addicts. *J Pers Assess*. 2018;100:660–70. <https://doi.org/10.1080/00223891.2018.1428984>.
136. Hopwood CJ, Good EW, Morey LC. Validity of the DSM-5 levels of Personality Functioning Scale-Self Report. *J Pers Assess*. 2018;100:650–9. <https://doi.org/10.1080/00223891.2017.1420660>. **Study in a large sample on the validity of DSM-5 AMPD criterion A and B as well as their associations with DSM-IV PDs, interpersonal behaviour, and general personality traits. Findings suggest a general factor for criterion A as well as differential associations of criterion B traits with a range of constructs.**
137. Sleep CE, Lynam D, Widiger TA, Crowe ML, Miller J. An evaluation of DSM-5 section III personality disorder criterion A (impairment) in accounting for psychopathology. *Psychol Assess* in press. <https://doi.org/10.31234/osf.io/z48tv>.
138. Nelson SM, Huprich SK, Meehan KB, Siefert C, Haggerty G, Sexton J, et al. Convergent and discriminant validity and utility of the DSM-5 levels of Personality Functioning Questionnaire (DLOPFQ): associations with medical health care provider ratings and measures of physical health. *J Pers Assess*. 2018;100:671–9. <https://doi.org/10.1080/00223891.2018.1492415>.
139. Busmann M, Wrege J, Meyer AH, Ritzler F, Schmidlin M, Lang UE, et al. Alternative model of personality disorders (DSM-5) predicts dropout in inpatient psychotherapy for patients with personality disorder. *Front Psychol*. 2019;10:735. <https://doi.org/10.3389/fpsyg.2019.00952>.
140. Somma A, Borroni S, Maffei C, Giarolli LE, Markon KE, Krueger RF, et al. Reliability, factor structure, and associations with measures of problem relationship and behavior of the Personality Inventory for DSM-5 in a sample of Italian community-dwelling adolescents. *J Personal Disord*. 2017;31:624–46. [https://doi.org/10.1521/pedi\\_2017\\_31\\_272](https://doi.org/10.1521/pedi_2017_31_272).
141. Watters CA, Bagby RM. A meta-analysis of the five-factor internal structure of the Personality Inventory for DSM-5. *Psychol Assess*. 2018;30:1255–60. <https://doi.org/10.1037/pas0000605>.
142. Somma A, Krueger RF, Markon KE, Fossati A. The replicability of the personality inventory for DSM-5 domain scale factor structure in U.S. and non-U.S. samples: a quantitative review of the published literature. *Psychol Assess* in press. <https://doi.org/10.1037/pas0000711>.
143. Wright AGC, Thomas KM, Hopwood CJ, Markon KE, Pincus AL, Krueger RF. The hierarchical structure of DSM-5 pathological personality traits. *J Abnorm Psychol*. 2012;121:951–7. <https://doi.org/10.1037/a0027669>.
144. De Fruyt F, De Clercq B, de Bolle M, Wille B, Markon KE, Krueger RF. General and maladaptive traits in a five-factor framework for DSM-5 in a university student sample. *Assessment*. 2013;20:295–307. <https://doi.org/10.1177/1073191113475808>.
145. van den Broeck J, Bastiaansen L, Rossi G, Dierckx E, De Clercq B, Hofmans J. Hierarchical structure of maladaptive personality traits in older adults: joint factor analysis of the PID-5 and the DAPP-BQ. *J Personal Disord*. 2014;28:198–211. [https://doi.org/10.1521/pedi\\_2013\\_27\\_114](https://doi.org/10.1521/pedi_2013_27_114).
146. Bo S, Bach B, Mortensen EL, Simonsen E. Reliability and hierarchical structure of DSM-5 pathological traits in a Danish mixed sample. *J Personal Disord*. 2016;30:112–29. [https://doi.org/10.1521/pedi\\_2015\\_29\\_187](https://doi.org/10.1521/pedi_2015_29_187).
147. De Clercq B, De Fruyt F, de Bolle M, van Hiel A, Markon KE, Krueger RF. The hierarchical structure and construct validity of the PID-5 trait measure in adolescence. *J Pers*. 2014;82:158–69. <https://doi.org/10.1111/jopy.12042>.
148. Morey LC, Krueger RF, Skodol AE. The hierarchical structure of clinician ratings of proposed DSM-5 pathological personality traits. *J Abnorm Psychol*. 2013;122:836–41. <https://doi.org/10.1037/a0034003>.
149. de Caluwé E, Verbeke L, van Aken M, van der Heijden PT, de Clercq B. The DSM-5 trait measure in a psychiatric sample of late adolescents and emerging adults: structure, reliability, and validity. *J Personal Disord*. 2019;33:101–18. [https://doi.org/10.1521/pedi\\_2018\\_32\\_333](https://doi.org/10.1521/pedi_2018_32_333).
150. Lim DSH, Gwee AJ, Hong RY. Associations between the DSM-5 section III trait model and impairments in functioning in Singaporean college students. *J Personal Disord* in press. [https://doi.org/10.1521/pedi\\_2018\\_32\\_353](https://doi.org/10.1521/pedi_2018_32_353).
151. Bastiaens T, Smits D, de HM, Vanwalleghem D, Claes L. DSM-5 section III personality traits and section II personality disorders in a Flemish community sample. *Psychiatry Res*. 2016;238:290–8. <https://doi.org/10.1016/j.psychres.2016.02.056>.
152. Watters CA, Sellbom M, Uliaszek AA, Bagby RM. Clarifying the interstitial nature of facets from the Personality Inventory for DSM-5 using the five factor model of personality. *Personal Disord* in press. <https://doi.org/10.1037/per0000327>.
153. Jopp AM, South SC. Investigating the Personality Inventory for DSM-5 using self and spouse reports. *J Personal Disord*. 2015;29:193–214. [https://doi.org/10.1521/pedi\\_2014\\_28\\_153](https://doi.org/10.1521/pedi_2014_28_153).
154. Ashton MC, de Vries RE, Lee K. Trait variance and response style variance in the scales of the Personality Inventory for DSM-5 (PID-5). *J Pers Assess*. 2017;99:192–203. <https://doi.org/10.1080/00223891.2016.1208210>.
155. Quilty LC, Cosentino N, Bagby RM. Response bias and the Personality Inventory for DSM-5: contrasting self- and informant-report. *Personal Disord*. 2018;9:346–53. <https://doi.org/10.1037/per0000246>.
156. Bottesi G, Ghisi M, Martignon A, Sica C. Self-other agreement in DSM-5 section III dimensional personality traits: a study on Italian community individuals. *Pers Individ Dif* 2018;130:135–40. <https://doi.org/10.1016/j.paid.2018.04.006>.
157. Samuel DB, Suzuki T, Bucher MA, Griffin SA. The agreement between clients' and their therapists' ratings of personality disorder traits. *J Consult Clin Psychol*. 2018;86:546–55. <https://doi.org/10.1037/ccp0000304>.
158. Sleep CE, Lamkin J, Lynam DR, Campbell WK, Miller JD. Personality disorder traits: testing insight regarding presence of traits, impairment, and desire for change. *Personal Disord*. 2019;10:123–31. <https://doi.org/10.1037/per0000305>.

159. Oltmanns JR, Oltmanns T. Self–other agreement on ratings of personality disorder symptoms and traits: three meta-analyses. In: Letzring TD, Spain JS, editors. *The handbook of accurate personality judgment: theory and empirical findings*. New York: Oxford University Press; in press. <https://doi.org/10.31234/osf.io/mka3j>.
160. Livesley JW, Jackson DN. *Manual for the dimensional assessment of personality pathology-basic questionnaire*. Port Huron: Sigma Press; 2009.
161. Simms LJ, Goldberg LR, Roberts JE, Watson D, Welte J, Rotterman JH. Computerized adaptive assessment of personality disorder: introducing the CAT–PD project. *J Pers Assess*. 2011;93:380–9. <https://doi.org/10.1080/00223891.2011.577475>.
162. Crego C, Widiger TA. Convergent and discriminant validity of alternative measures of maladaptive personality traits. *Psychol Assess*. 2016;28:1561–75. <https://doi.org/10.1037/pas0000282>.
163. Yalch MM, Hopwood CJ. Convergent, discriminant, and criterion validity of DSM-5 traits. *Personal Disord*. 2016;7:394–404. <https://doi.org/10.1037/per0000165>.
164. Anderson JL, Sellbom M, Bagby RM, Quilty LC, Veltri CO, Markon KE, et al. On the convergence between PSY-5 domains and PID-5 domains and facets: implications for assessment of DSM-5 personality traits. *Assessment*. 2013;20:286–94. <https://doi.org/10.1177/1073191112471141>.
165. Watson D, Stasik SM, Ro E, Clark LA. Integrating normal and pathological personality: relating the DSM-5 trait-dimensional model to general traits of personality. *Assessment*. 2013;20:312–26. <https://doi.org/10.1177/1073191113485810>.
166. Crego C, Oltmanns JR, Widiger TA. FFMPD scales: comparisons with the FFM, PID-5, and CAT-PD-SF. *Psychol Assess*. 2018;30:62–73. <https://doi.org/10.1037/pas0000495>.
167. Helle AC, Mullins-Sweatt SN. Maladaptive personality trait models: validating the five-factor model maladaptive trait measures with the personality inventory for DSM-5 and NEO personality inventory. *Assessment*. 2019;26:375–85. <https://doi.org/10.1177/1073191117709071>.
168. Wright AGC, Simms LJ. On the structure of personality disorder traits: conjoint analyses of the CAT-PD, PID-5, and NEO-PI-3 trait models. *Personal Disord*. 2014;5:43–54. <https://doi.org/10.1037/per0000037>.
169. Gutiérrez F, Ruiz J, Peri JM, Gárriz M, Vall G, Cavero M. Toward an integrated model of pathological personality traits: common hierarchical structure of the PID-5 and the DAPP-BQ. *J Personal Disord* in press. [https://doi.org/10.1521/pedi\\_2019\\_33\\_431](https://doi.org/10.1521/pedi_2019_33_431).
170. Ben-Porath YS, Tellegen A. *Minnesota Multiphasic Personality Inventory-2 Restructured Form: manual for administration, scoring, and interpretation*. Minneapolis: University of Minnesota Press; 2008.
171. Anderson JL, Sellbom M, Ayeart L, Quilty LC, Chmielewski M, Bagby RM. Associations between DSM-5 section III personality traits and the Minnesota Multiphasic Personality Inventory 2-Restructured Form (MMPI-2-RF) scales in a psychiatric patient sample. *Psychol Assess*. 2015;27:801–15. <https://doi.org/10.1037/pas0000096>.
172. Hopwood CJ, Wright AGC, Krueger RF, Schade N, Markon KE, Morey LC. DSM-5 pathological personality traits and the Personality Assessment Inventory. *Assessment*. 2013;20:269–85. <https://doi.org/10.1177/1073191113486286>.
173. Sleep CE, Hyatt CS, Lamkin J, Maples-Keller JL, Miller JD. Examining the relations among the DSM-5 alternative model of personality, the five-factor model, and externalizing and internalizing behavior. *Personal Disord*. 2018;9:379–84. <https://doi.org/10.1037/per0000240>.
174. Helle AC, Trull TJ, Widiger TA, Mullins-Sweatt SN. Utilizing interview and self-report assessment of the five-factor model to examine convergence with the alternative model for personality disorders. *Personal Disord*. 2017;8:247–54. <https://doi.org/10.1037/per0000174>.
175. Ashton MC, Lee K, de Vries RE, Hendrickse J, Born MP. The maladaptive personality traits of the Personality Inventory for DSM-5 (PID-5) in relation to the HEXACO personality factors and schizotypy/dissociation. *J Personal Disord*. 2012;26:641–59. <https://doi.org/10.1521/pedi.2012.26.5.641>.
176. Gore WL, Widiger TA. The DSM-5 dimensional trait model and five-factor models of general personality. *J Abnorm Psychol*. 2013;122:816–21. <https://doi.org/10.1037/a0032822>.
177. Quilty LC, Ayeart LE, Chmielewski M, Pollock BG, Bagby RM. The psychometric properties of the Personality Inventory for DSM-5 in an APA DSM-5 field trial sample. *Assessment*. 2013;20:362–9. <https://doi.org/10.1177/1073191113486183>.
178. Thomas KM, Yalch MM, Krueger RF, Wright AGC, Markon KE, Hopwood CJ. The convergent structure of DSM-5 personality trait facets and five-factor model trait domains. *Assessment*. 2013;20:308–11. <https://doi.org/10.1177/1073191112457589>.
179. Griffin SA, Samuel DB. A closer look at the lower-order structure of the Personality Inventory for DSM-5: comparison with the five-factor model. *Personal Disord*. 2014;5:406–12. <https://doi.org/10.1037/per0000074>.
180. Suzuki T, Samuel DB, Pahlen S, Krueger RF. DSM-5 alternative personality disorder model traits as maladaptive extreme variants of the five-factor model: an item-response theory analysis. *J Abnorm Psychol*. 2015;124:343–54. <https://doi.org/10.1037/abn0000035>.
181. DeYoung CG, Carey BE, Krueger RF, Ross SR. Ten aspects of the Big Five in the Personality Inventory for DSM-5. *Personal Disord*. 2016;7:113–23. <https://doi.org/10.1037/per0000170>.
182. Pocnet C, Antonietti J-P, Handschin P, Massoudi K, Rossier J. The many faces of personality: the DSM-5 dimensional and categorical models and the five-factor model. *Pers Individ Dif* 2018;121:11–8. <https://doi.org/10.1016/j.paid.2017.09.005>.
183. Crego C, Widiger TA. The conceptualization and assessment of schizotypal traits: a comparison of the FFSI and PID-5. *J Personal Disord*. 2017;31:606–23. [https://doi.org/10.1521/pedi\\_2016\\_30\\_270](https://doi.org/10.1521/pedi_2016_30_270).
184. Widiger TA, Crego C. HiTOP thought disorder, DSM-5 psychoticism, and five factor model openness. *J Res Pers*. 2019;80:72–7. <https://doi.org/10.1016/j.jrp.2019.04.008>.
185. Suzuki T, Griffin SA, Samuel DB. Capturing the DSM-5 alternative personality disorder model traits in the five-factor model’s nomological net. *J Pers*. 2017;85:220–31. <https://doi.org/10.1111/jopy.12235>.
186. Bach B, Sellbom M, Skjernov M, Simonsen E. ICD-11 and DSM-5 personality trait domains capture categorical personality disorders: finding a common ground. *Aust N Z J Psychiatry*. 2018;52:425–34. <https://doi.org/10.1177/0004867417727867>. **Comparison of the DSM-5 AMPD criterion B with the PD trait model proposed for ICD-11 in a sample of psychiatric outpatients that were administered the Structured Clinical Interview for DSM-IV PDs. A preliminary category-to-domain “cross-walk” is provided.**
187. Yam WH, Simms LJ. Comparing criterion- and trait-based personality disorder diagnoses in DSM-5. *J Abnorm Psychol*. 2014;123:802–8. <https://doi.org/10.1037/a0037633>.
188. Rojas SL, Widiger TA. Coverage of the DSM-IV-TR/DSM-5 section II personality disorders with the DSM-5 dimensional trait model. *J Personal Disord*. 2017;31:462–82. [https://doi.org/10.1521/pedi\\_2016\\_30\\_262](https://doi.org/10.1521/pedi_2016_30_262).
189. Morey LC, Benson KT, Skodol AE. Relating DSM-5 section III personality traits to section II personality disorder diagnoses. *Psychol Med*. 2016;46:647–55. <https://doi.org/10.1017/S0033291715002226>.

190. Bach B, Anderson J, Simonsen E. Continuity between interview-rated personality disorders and self-reported DSM-5 traits in a Danish psychiatric sample. *Personal Disord.* 2017;8:261–7. <https://doi.org/10.1037/per0000171>.
191. Anderson J, Snider S, Sellbom M, Krueger R, Hopwood C. A comparison of the DSM-5 section II and section III personality disorder structures. *Psychiatry Res.* 2014;216:363–72. <https://doi.org/10.1016/j.psychres.2014.01.007>.
192. Miller JD, Few LR, Lynam DR, MacKillop J. Pathological personality traits can capture DSM-IV personality disorder types. *Personal Disord.* 2015;6:32–40. <https://doi.org/10.1037/per0000064>.
193. Hopwood CJ, Thomas KM, Markon KE, Wright AGC, Krueger RF. DSM-5 personality traits and DSM-IV personality disorders. *J Abnorm Psychol.* 2012;121:424–32. <https://doi.org/10.1037/a0026656>.
194. Samuel DB, Hopwood CJ, Krueger RF, Thomas KM, Ruggero CJ. Comparing methods for scoring personality disorder types using maladaptive traits in DSM-5. *Assessment.* 2013;20:353–61. <https://doi.org/10.1177/1073191113486182>.
195. Strickland CM, Hopwood CJ, Bornovalova MA, Rojas EC, Krueger RF, Patrick CJ. Categorical and dimensional conceptions of personality pathology in DSM-5: toward a model-based synthesis. *J Personal Disord.* 2019;33:185–213. [https://doi.org/10.1521/pedi\\_2018\\_32\\_339](https://doi.org/10.1521/pedi_2018_32_339).
196. Orbons IMJ, Rossi G, Verheul R, Schoutrop MJA, Derksen JLL, Segal DL, et al. Continuity between DSM-5 section II and III personality disorders in a Dutch clinical sample. *J Pers Assess.* 2019;101:274–83. <https://doi.org/10.1080/00223891.2018.1467427>.
197. McClintock AS, McCarrick SM. An examination of dependent personality disorder in the alternative DSM-5 model for personality disorders. *J Psychopathol Behav Assess.* 2017;39:635–41. <https://doi.org/10.1007/s10862-017-9621-y>.
198. Evans CM, Simms LJ. Assessing inter-model continuity between the section II and section III conceptualizations of borderline personality disorder in DSM-5. *Personal Disord.* 2018;9:290–6. <https://doi.org/10.1037/per0000243>.
199. Bach B, Sellbom M, Bo S, Simonsen E. Utility of DSM-5 section III personality traits in differentiating borderline personality disorder from comparison groups. *Eur Psychiatry.* 2016;37:22–7. <https://doi.org/10.1016/j.eurpsy.2016.04.006>.
200. Calvo N, Valero S, Sáez-Francàs N, Gutiérrez F, Casas M, Ferrer M. Borderline personality disorder and Personality Inventory for DSM-5 (PID-5): dimensional personality assessment with DSM-5. *Compr Psychiatry.* 2016;70:105–11. <https://doi.org/10.1016/j.comppsy.2016.07.002>.
201. Bach B, Sellbom M. Continuity between DSM-5 categorical criteria and traits criteria for borderline personality disorder. *Can J Psychiatr.* 2016;61:489–94. <https://doi.org/10.1177/0706743716640756>.
202. Sellbom M, Sansone RA, Songer DA, Anderson JL. Convergence between DSM-5 section II and section III diagnostic criteria for borderline personality disorder. *Aust N Z J Psychiatry.* 2014;48:325–32. <https://doi.org/10.1177/0004867413511997>.
203. Fowler JC, Madan A, Allen JG, Patriquin M, Sharp C, Oldham JM, et al. Clinical utility of the DSM-5 alternative model for borderline personality disorder: differential diagnostic accuracy of the BFI, SCID-II-PQ, and PID-5. *Compr Psychiatry.* 2018;80:97–103. <https://doi.org/10.1016/j.comppsy.2017.09.003>.
204. Anderson JL, Sellbom M, Shealy RC. Clinician perspectives of antisocial and borderline personality disorders using DSM-5 section III dimensional personality traits. *J Personal Disord.* 2018;32:262–76. [https://doi.org/10.1521/pedi\\_2017\\_31\\_298](https://doi.org/10.1521/pedi_2017_31_298).
205. Yalch MM, Schroder HS, Dawood S, Donnellan MB. Relative effects of maladaptive traits and anxiety mindset on borderline personality disorder symptoms. *J Soc Clin Psychol.* 2017;36:285–99. <https://doi.org/10.1521/jscp.2017.36.4.285>.
206. Bortolla R, Cavicchioli M, Galli M, Verschure PFMJ, Maffei C. A comprehensive evaluation of emotional responsiveness in borderline personality disorder: a support for hypersensitivity hypothesis. *Borderline Personal Disord Emot Dysregul.* 2019;6:495. <https://doi.org/10.1186/s40479-019-0105-4>.
207. Liggett J, Sellbom M, Carmichael KLC. Examining the DSM-5 section III criteria for obsessive-compulsive personality disorder in a community sample. *J Personal Disord.* 2017;31:790–809. [https://doi.org/10.1521/pedi\\_2017\\_31\\_281](https://doi.org/10.1521/pedi_2017_31_281).
208. Liggett J, Sellbom M, Bach B. Continuity between DSM-5 section II and section III personality traits for obsessive-compulsive personality disorder. *Clin Psychol Psychother.* 2018;25:144–51. <https://doi.org/10.1002/cpp.2147>.
209. Wygant DB, Sellbom M, Sleep CE, Wall TD, Applegate KC, Krueger RF, et al. Examining the DSM-5 alternative personality disorder model operationalization of antisocial personality disorder and psychopathy in a male correctional sample. *Personal Disord.* 2016;7:229–39. <https://doi.org/10.1037/per0000179>.
210. Miller JD, Lamkin J, Maples-Keller JL, Sleep CE, Lynam DR. A test of the empirical profile and coherence of the DSM-5 psychopathy specifier. *Psychol Assess.* 2018;30:870–81. <https://doi.org/10.1037/pas0000536>.
211. Fossati A, Somma A, Borroni S, Pincus AL, Markon KE, Krueger RF. Profiling pathological narcissism according to DSM-5 domains and traits: a study on consecutively admitted Italian psychotherapy patients. *Psychol Assess.* 2017;29:1400–11. <https://doi.org/10.1037/pas0000348>.
212. Miller JD, Gentile B, Wilson L, Campbell WK. Grandiose and vulnerable narcissism and the DSM-5 pathological personality trait model. *J Pers Assess.* 2013;95:284–90. <https://doi.org/10.1080/00223891.2012.685907>.
213. Wright AGC, Pincus AL, Thomas KM, Hopwood CJ, Markon KE, Krueger RF. Conceptions of narcissism and the DSM-5 pathological personality traits. *Assessment.* 2013;20:339–52. <https://doi.org/10.1177/1073191113486692>.
214. Sellbom M, Carmichael KLC, Liggett J. Examination of DSM-5 section III avoidant personality disorder in a community sample. *Personal Ment Health.* 2017;11:299–313. <https://doi.org/10.1002/pmh.1388>.
215. Somma A, Krueger RF, Markon KE, Borroni S, Fossati A. Schizotypy from the perspective of the DSM-5 alternative model of personality traits: a study on a sample of 1056 Italian adult university students. *J Psychopathol Behav Assess* in press. <https://doi.org/10.1007/s10862-019-09718-1>.
216. Watters CA, Bagby RM, Sellbom M. Meta-analysis to derive an empirically based set of personality facet criteria for the alternative DSM-5 model for personality disorders. *Personal Disord.* 2019;10:97–104. <https://doi.org/10.1037/per0000307>.
217. Suzuki T, South SC, Samuel DB, Wright AGC, Yalch MM, Hopwood CJ, et al. Measurement invariance of the DSM-5 section III pathological personality trait model across sex. *Personal Disord.* 2019;10:114–22. <https://doi.org/10.1037/per0000291>.
218. Veith AC, Russell TD, King AR. PID-5 trait mediation of childhood maltreatment effects. *Pers Individ Dif* 2017;104:58–63. <https://doi.org/10.1016/j.paid.2016.07.024>.
219. Zimmermann J, Masuhr O, Jaeger U, Leising D, Benecke C, Spitzer C. Maladaptive Persönlichkeitseigenschaften gemäß DSM-5: Zusammenhänge mit psychischer Belastung und ICD-10 Diagnosen in einer klinischen Stichprobe. *Persönlichkeitsstörungen: Theorie und Therapie.* 2014;18:46–58.
220. Benzi IMA, Preti E, Di Pierro R, Clarkin JF, Madeddu F. Maladaptive personality traits and psychological distress in adolescence: the moderating role of personality functioning. *Pers Individ Dif.* <https://doi.org/10.1016/j.paid.2018.06.026>.



221. Bastiaens T, Smits D, de HM, Thys E, Bryon H, Sweers K, et al. The relationship between the Personality Inventory for the DSM-5 (PID-5) and the psychotic disorder in a clinical sample. *Assessment*. 2019;26:315–23. <https://doi.org/10.1177/1073191117693922>.
222. Drvaric L, Bagby RM, Kiang M, Mizrahi R. Maladaptive personality traits in patients identified at lower-risk and higher-risk for psychosis. *Psychiatry Res*. 2018;268:348–53. <https://doi.org/10.1016/j.psychres.2018.08.004>.
223. Schimmenti A, Musetti A, Costanzo A, Terrone G, Maganuco NR, Aglieri Rinella C, et al. The unfabulous four: maladaptive personality functioning, insecure attachment, dissociative experiences, and problematic internet use among young adults. *Int J Ment Heal Addict in press*. <https://doi.org/10.1007/s11469-019-00079-0>.
224. Fowler JC, Madan A, Allen JG, Oldham JM, Frueh BC. Differentiating bipolar disorder from borderline personality disorder: diagnostic accuracy of the difficulty in emotion regulation scale and personality inventory for DSM-5. *J Affect Disord*. 2019;245:856–60. <https://doi.org/10.1016/j.jad.2018.11.079>.
225. Smith TE, Samuel DB. A multi-method examination of the links between ADHD and personality disorder. *J Personal Disord*. 2017;31:26–48. [https://doi.org/10.1521/pedi\\_2016\\_30\\_236](https://doi.org/10.1521/pedi_2016_30_236).
226. Creswell KG, Bachrach RL, Wright AGC, Pinto A, Ansell E. Predicting problematic alcohol use with the DSM-5 alternative model of personality pathology. *Personal Disord*. 2016;7:103–11. <https://doi.org/10.1037/per0000131>. **A large study investigating associations of DSM-5 AMPD criterion B with alcohol abuse. Criterion B traits disinhibition and antagonism show a clear association. Additionally there seems to be an interaction effect moderated by age.**
227. Moraleda-Barreno E, Díaz-Batanero C, Pérez-Moreno PJ, Gómez-Bujedo J, Lozano OM. Relations between facets and personality domains with impulsivity: new evidence using the DSM-5 section III framework in patients with substance use disorders. *Personal Disord*. 2018;9:490–5. <https://doi.org/10.1037/per0000278>.
228. Seyed Hashemi SG, Merghati Khoei E, Hosseinnezhad S, Mousavi M, Dadashzadeh S, Mostafaloo T, et al. Personality traits and substance use disorders: comparative study with drug user and non-drug user population. *Pers Individ Dif* 2019;148:50–6. <https://doi.org/10.1016/j.paid.2019.05.015>.
229. Evans CM, Simms LJ. The latent structure of self-harm. *J Abnorm Psychol*. 2019;128:12–24. <https://doi.org/10.1037/abn0000398>.
230. Carlotta D, Krueger RF, Markon KE, Borroni S, Frera F, Somma A, et al. Adaptive and maladaptive personality traits in high-risk gamblers. *J Personal Disord*. 2015;29:378–92. [https://doi.org/10.1521/pedi\\_2014\\_28\\_164](https://doi.org/10.1521/pedi_2014_28_164).
231. Laier C, Wegmann E, Brand M. Personality and cognition in gamers: avoidance expectancies mediate the relationship between maladaptive personality traits and symptoms of internet-gaming disorder. *Front Psychiatry*. 2018;9:1058. <https://doi.org/10.3389/fpsy.2018.00304>.
232. James LM, Anders SL, Peterson CK, Engdahl BE, Krueger RF, Georgopoulos AP. DSM-5 personality traits discriminate between posttraumatic stress disorder and control groups. *Exp Brain Res*. 2015;233:2021–8. <https://doi.org/10.1007/s00221-015-4273-1>.
233. Waszczuk MA, Li K, Ruggero CJ, Clouston SAP, Luft BJ, Kotov R. Maladaptive personality traits and 10-year course of psychiatric and medical symptoms and functional impairment following trauma. *Ann Behav Med*. 2018;362(13). <https://doi.org/10.1093/abm/kax030>. **Extensive statistical analysis on the associations of DSM-5 AMPD criterion B traits and facets with the initial severity and course of posttraumatic stress disorder, gastroesophageal reflux disease symptoms, lower respiratory symptoms as well as mental and physical functioning impairments in a sample of World Trade Center respondents. Though the AMPD criterion B was assessed at the end of the 10-year course, substantial associations were found.**
234. Keeley JW, Flanagan EH, McCluskey DL. Functional impairment and the DSM-5 dimensional system for personality disorder. *J Personal Disord*. 2014;28:657–74. [https://doi.org/10.1521/pedi\\_2014\\_28\\_133](https://doi.org/10.1521/pedi_2014_28_133).
235. Chmielewski M, Ruggero CJ, Kotov R, Liu K, Krueger RF. Comparing the dependability and associations with functioning of the DSM-5 section III trait model of personality pathology and the DSM-5 section II personality disorder model. *Personal Disord*. 2017;8:228–36. <https://doi.org/10.1037/per0000213>.
236. Boland JK, Damjanovic T, Anderson JL. Evaluating the role of functional impairment in personality psychopathology. *Psychiatry Res*. 2018;270:1017–26. <https://doi.org/10.1016/j.psychres.2018.03.049>.
237. Bach B, Lee C, Mortensen EL, Simonsen E. How do DSM-5 personality traits align with schema therapy constructs? *J Personal Disord*. 2016;30:502–29. [https://doi.org/10.1521/pedi\\_2015\\_29\\_212](https://doi.org/10.1521/pedi_2015_29_212).
238. Williams TF, Simms LJ. Personality disorder models and their coverage of interpersonal problems. *Personal Disord*. 2016;7:15–27. <https://doi.org/10.1037/per0000140>.
239. Wright AGC, Pincus AL, Hopwood CJ, Thomas KM, Markon KE, Krueger RF. An interpersonal analysis of pathological personality traits in DSM-5. *Assessment*. 2012;19:263–75. <https://doi.org/10.1177/1073191112446657>.
240. Hopwood CJ, Schade N, Krueger RF, Wright AGC, Markon KE. Connecting DSM-5 personality traits and pathological beliefs: toward a unifying model. *J Psychopathol Behav Assess*. 2013;35:162–72. <https://doi.org/10.1007/s10862-012-9332-3>.
241. Granieri A, La Marca L, Mannino G, Giunta S, Guglielmucci F, Schimmenti A. The relationship between defense patterns and DSM-5 maladaptive personality domains. *Front Psychol*. 2017;8:1926. <https://doi.org/10.3389/fpsyg.2017.01926>.
242. Abdi R, Pak R. The mediating role of emotion dysregulation as a transdiagnostic factor in the relationship between pathological personality dimensions and emotional disorders symptoms severity. *Pers Individ Dif* 2019;142:282–7. <https://doi.org/10.1016/j.paid.2018.09.026>.
243. Dunne AL, Gilbert F, Daffern M. Investigating the relationship between DSM-5 personality disorder domains and facets and aggression in an offender population using the personality inventory for the DSM-5. *J Personal Disord*. 2018;32:668–93. [https://doi.org/10.1521/pedi\\_2017\\_31\\_322](https://doi.org/10.1521/pedi_2017_31_322).
244. Somma A, Krueger RF, Markon KE, Alajmo VBM, Arlotta E, Beretta S, et al. DSM-5 alternative model of personality disorder dysfunctional personality traits as predictors of self-reported aggression in an Italian sample of consecutively admitted, personality-disordered psychotherapy patients. *J Personal Disord in press*. [https://doi.org/10.1521/pedi\\_2019\\_33\\_430](https://doi.org/10.1521/pedi_2019_33_430).
245. Dowgwillo EA, Ménard KS, Krueger RF, Pincus AL. DSM-5 pathological personality traits and intimate partner violence among male and female college students. *Violence Vict*. 2016;31:416–37. <https://doi.org/10.1891/0886-6708.VV-D-14-00109>.
246. Pace U, D'Urso G, Zappulla C. Hating among adolescents: common contributions of cognitive distortions and maladaptive personality traits. *Curr Psychol in press*. <https://doi.org/10.1007/s12144-019-00278-x>.
247. Russell TD, King AR. Distrustful, conventional, entitled, and dysregulated: PID-5 personality facets predict hostile masculinity and sexual violence in community men. *J Interpers Violence in press*. <https://doi.org/10.1177/0886260517689887>.
248. Norton-Baker M, Russell TD, King AR. “He seemed so normal”: single tactic perpetrators of sexual violence are similar to non-

- violent men using the DSM-5's hybrid personality disorder model. *Pers Individ Dif* 2018;123:241–6. <https://doi.org/10.1016/j.paid.2017.11.032>.
249. Russell TD, Doan CM, King AR. Sexually violent women: the PID-5, everyday sadism, and adversarial sexual attitudes predict female sexual aggression and coercion against male victims. *Pers Individ Dif* 2017;111:242–9. <https://doi.org/10.1016/j.paid.2017.02.019>.
250. Russell TD, King AR. Mean girls: PID-5 personality traits and everyday sadism predict hostile femininity. *Personal Individ Differ*. 2017;104:252–7. <https://doi.org/10.1016/j.paid.2016.08.020>.
251. Mitchell VE, Mogilski JK, Zeigler-Hill V, Welling LLM. Mate poaching strategies are differentially associated with pathological personality traits and risk-taking in men and women. *Personal Individ Differ*. 2019;142:110–5. <https://doi.org/10.1016/j.paid.2019.01.045>.
252. Russell TD, Pocknell V, King AR. Lesbians and bisexual women and men have higher scores on the Personality Inventory for the DSM-5 (PID-5) than heterosexual counterparts. *Personal Individ Differ*. 2017;110:119–24. <https://doi.org/10.1016/j.paid.2017.01.039>.
253. Strickland CM, Drislane LE, Lucy M, Krueger RF, Patrick CJ. Characterizing psychopathy using DSM-5 personality traits. *Assessment*. 2013;20:327–38. <https://doi.org/10.1177/1073191113486691>.
254. Sleep CE, Lynam DR, Hyatt CS, Miller JD. Perils of partialing redux: the case of the dark triad. *J Abnorm Psychol*. 2017;126:939–50. <https://doi.org/10.1037/abn0000278>.
255. Grigoras M, Wille B. Shedding light on the dark side: associations between the dark triad and the DSM-5 maladaptive trait model. *Pers Individ Dif* 2017;104:516–21. <https://doi.org/10.1016/j.paid.2016.09.016>.
256. Wissing BG, Reinhard M-A. The dark triad and the PID-5 maladaptive personality traits: accuracy, confidence and response bias in judgments of veracity. *Front Psychol*. 2017;8:1549. <https://doi.org/10.3389/fpsyg.2017.01549>.
257. Zeigler-Hill V, Noser AE. Characterizing spitefulness in terms of the DSM-5 model of pathological personality traits. *Curr Psychol*. 2018;37:14–20. <https://doi.org/10.1007/s12144-016-9484-5>.
258. Zeigler-Hill V, Mandracchia JT, Dahlen ER, Shango R, Vrabel JK. Pathological personality traits and criminogenic thinking styles. *Pers Individ Dif* 2017;110:41–8. <https://doi.org/10.1016/j.paid.2017.01.021>.
259. Zeigler-Hill V, Besser A, Cronin S, Vrabel JK. Pathological personality traits and utilitarian moral judgments. *J Soc Clin Psychol*. 2018;37:182–200. <https://doi.org/10.1521/jscp.2018.37.3.182>.
260. Swami V, Weis L, Lay A, Barron D, Furnham A. Associations between belief in conspiracy theories and the maladaptive personality traits of the personality inventory for DSM-5. *Psychiatry Res*. 2016;236:86–90. <https://doi.org/10.1016/j.psychres.2015.12.027>.
261. Bastiaens T, Claes L, Smits D, Vanwallegem D, de Hert M. Self-reported cognitive biases are equally present in patients diagnosed with psychotic versus nonpsychotic disorders. *J Nerv Ment Dis*. 2018;206:122–9. <https://doi.org/10.1097/NMD.0000000000000763>.
262. Zeigler-Hill V, McCabe GA, Vrabel JK. The dark side of humor: DSM-5 pathological personality traits and humor styles. *Eur J Psychol*. 2016;12:363–76. <https://doi.org/10.5964/ejop.v12i3.1109>.
263. Perchtold CM, Weiss EM, Rominger C, Feyaerts K, Ruch W, Fink A, et al. Humorous cognitive reappraisal: more benign humour and less “dark” humour is affiliated with more adaptive cognitive reappraisal strategies. *PLoS One*. 2019;14:e0211618. <https://doi.org/10.1371/journal.pone.0211618>.
264. Schimmenti A, Sideli L, La Marca L, Gori A, Terrone G. Reliability, validity, and factor structure of the Maladaptive Daydreaming Scale (MDS-16) in an Italian sample. *J Pers Assess* in press. <https://doi.org/10.1080/00223891.2019.1594240>.
265. Fossati A, Somma A, Borroni S, Markon KE, Krueger RF. Executive functioning correlates of DSM-5 maladaptive personality traits: initial evidence from an Italian sample of consecutively admitted adult outpatients. *J Psychopathol Behav Assess*. 2018;40:484–96. <https://doi.org/10.1007/s10862-018-9645-y>.
266. James LM, Engdahl BE, Leuthold AC, Krueger RF, Georgopoulos AP. Pathological personality traits modulate neural interactions. *Exp Brain Res*. 2015;233:3543–52. <https://doi.org/10.1007/s00221-015-4406-6>.
267. da Costa HP, Vrabel JK, Zeigler-Hill V, Vonk J. DSM-5 pathological personality traits are associated with the ability to understand the emotional states of others. *J Res Pers*. 2018;75:1–11. <https://doi.org/10.1016/j.jrp.2018.05.001>.
268. Papousek I, Aydin N, Rominger C, Feyaerts K, Schmid-Zalaudek K, Lackner HK, et al. DSM-5 personality trait domains and withdrawal versus approach motivational tendencies in response to the perception of other people's desperation and angry aggression. *Biol Psychol*. 2018;132:106–15. <https://doi.org/10.1016/j.biopsycho.2017.11.010>.
269. Ackerman RA, Corretti CA. Pathological personality traits and intimacy processes within roommate relationships. *Eur J Personal*. 2015;29:152–72. <https://doi.org/10.1002/per.1991>.
270. Decuyper M, Gistelinc F, Vergauwe J, Pancorbo G, de Fruyt F. Personality pathology and relationship satisfaction in dating and married couples. *Personal Disord*. 2018;9:81–92. <https://doi.org/10.1037/per0000219>.
271. Wilson S, Elkins IJ, Bair JL, Oleynick VC, Malone SM, McGue M, et al. Maladaptive personality traits and romantic relationship satisfaction: a monozygotic co-twin control analysis. *J Abnorm Psychol*. 2018;127:339–47. <https://doi.org/10.1037/abn0000343>.
272. Fossati A, Krueger RF, Markon KE, Borroni S, Maffei C, Somma A. The DSM-5 alternative model of personality disorders from the perspective of adult attachment: a study in community-dwelling adults. *J Nerv Ment Dis*. 2015;203:252–8. <https://doi.org/10.1097/NMD.0000000000000274>. **In a large representative sample, adult attachment quality was significantly associated with all five DSM-5 AMPD criterion B traits. Highest associations were found for the trait domains negative affectivity and detachment, and for the trait facets anhedonia, depressivity, anxiousness, and withdrawal.**
273. Rosa-Mendes M, Pires R, Ferreira AS. Personality traits of the alternative DSM-5 model and the attachment dimensions in Portuguese adults. *Pers Individ Dif* 2019;143:21–9. <https://doi.org/10.1016/j.paid.2019.02.007>.
274. Zeigler-Hill V, Hobbs KA. The darker aspects of motivation: pathological personality traits and the fundamental social motives. *J Soc Clin Psychol*. 2017;36:87–107. <https://doi.org/10.1521/jscp.2017.36.2.87>.
275. Zimmermann J, Woods WC, Ritter S, Happel M, Masuhr O, Jaeger U, et al. Integrating structure and dynamics in personality assessment: first steps toward the development and validation of a personality dynamics diary. *Psychol Assess*. 2019;31:516–31. <https://doi.org/10.1037/pas0000625>.
276. Williams MM, Rogers R. Stigma experiences of patients with problematic personality traits: an investigation with the PID-5. *Stigma Health* in press. <https://doi.org/10.1037/sah0000153>.
277. Jonason PK, Zeigler-Hill V, Baldacchino J. Before and after: personality pathology, childhood conditions, and life history outcomes. *Pers Individ Dif* 2017;116:38–43. <https://doi.org/10.1016/j.paid.2017.04.027>.



278. Morey LC, Benson KT. Relating DSM-5 section II and section III personality disorder diagnostic classification systems to treatment planning. *Compr Psychiatry*. 2016;68:48–55. <https://doi.org/10.1016/j.comppsy.2016.03.010>.
279. Fossati A, Somma A, Borroni S, Maffei C, Markon KE, Krueger RF. A head-to-head comparison of the Personality Inventory for DSM-5 (PID-5) with the Personality Diagnostic Questionnaire-4 (PDQ-4) in predicting the general level of personality pathology among community dwelling subjects. *J Personal Disord*. 2016;30:82–94.
280. Fossati A, Somma A, Krueger RF, Markon KE, Borroni S. On the relationships between DSM-5 dysfunctional personality traits and social cognition deficits: a study in a sample of consecutively admitted Italian psychotherapy patients. *Clin Psychol Psychother*. 2017;24:1421–34. <https://doi.org/10.1002/cpp.2091>.
281. Anderson JL, Sellbom M, Wygant DB, Salekin RT, Krueger RF. Examining the associations between DSM-5 section III antisocial personality disorder traits and psychopathy in community and university samples. *J Personal Disord*. 2014;28:675–97. [https://doi.org/10.1521/pedi\\_2014\\_28\\_134](https://doi.org/10.1521/pedi_2014_28_134).
282. Anderson JL, Sellbom M, Sansone RA, Songer DA. Comparing external correlates of DSM-5 section II and section III dimensional trait operationalizations of borderline personality disorder. *J Personal Disord*. 2016;30:193–210. [https://doi.org/10.1521/pedi\\_2015\\_29\\_189](https://doi.org/10.1521/pedi_2015_29_189).
283. Simms LJ, Calabrese WR. Incremental validity of the DSM-5 section III personality disorder traits with respect to psychosocial impairment. *J Personal Disord*. 2016;30:95–111. [https://doi.org/10.1521/pedi\\_2015\\_29\\_185](https://doi.org/10.1521/pedi_2015_29_185).
284. Fowler JC, Patriquin MA, Madan A, Allen JG, Frueh BC, Oldham JM. Incremental validity of the PID-5 in relation to the five factor model and traditional polythetic personality criteria of the DSM-5. *Int J Methods Psychiatr Res*. 2017. <https://doi.org/10.1002/mpr.1526>.
285. Zimmermann J, Mayer A, Leising D, Krieger T, Grosse Holtforth M, Pretsch J. Exploring occasion specificity in the assessment of DSM-5 maladaptive personality traits. *Eur J Psychol Assess*. 2017;33:47–54. <https://doi.org/10.1027/1015-5759/a000271>.
286. Wright AGC, Calabrese WR, Rudick MM, Yam WH, Zelazny K, Williams TF, et al. Stability of the DSM-5 section III pathological personality traits and their longitudinal associations with psychosocial functioning in personality disordered individuals. *J Abnorm Psychol*. 2015;124:199–207. <https://doi.org/10.1037/abn0000018>.
287. van den Broeck J, Bastiaansen L, Rossi G, Dierckx E, de Clercq B. Age-neutrality of the trait facets proposed for personality disorders in DSM-5: a DIFAS analysis of the PID-5. *J Psychopathol Behav Assess*. 2013;35:487–94. <https://doi.org/10.1007/s10862-013-9364-3>.
288. Debast I, Rossi G, van Alphen SPJ. Age-neutrality of a brief assessment of the section III alternative model for personality disorders in older adults. *Assessment*. 2018;25:310–23. <https://doi.org/10.1177/1073191118754706>.
289. South SC, Krueger RF, Knudsen GP, Ystrom E, Czajkowski N, Aggen SH, et al. A population based twin study of DSM-5 maladaptive personality domains. *Personal Disord*. 2017;8:366–75. <https://doi.org/10.1037/per0000220>.
290. Bach B, Sellbom M, Simonsen E. Personality Inventory for DSM-5 (PID-5) in clinical versus nonclinical individuals: generalizability of psychometric features. *Assessment*. 2018;25:815–25. <https://doi.org/10.1177/1073191117709070>.
291. McGee Ng SA, Bagby RM, Goodwin BE, Burchett D, Sellbom M, Ayeart LE, et al. The effect of response bias on the Personality Inventory for DSM-5 (PID-5). *J Pers Assess*. 2016;98:51–61. <https://doi.org/10.1080/00223891.2015.1096791>.
292. Dhillon S, Bagby RM, Kushner SC, Burchett D. The impact of underreporting and overreporting on the validity of the Personality Inventory for DSM-5 (PID-5): a simulation analog design investigation. *Psychol Assess*. 2017;29:473–8. <https://doi.org/10.1037/pas0000359>.
293. Kendler KS, Aggen SH, Gillespie N, Neale MC, Knudsen GP, Krueger RF, et al. The genetic and environmental sources of resemblance between normative personality and personality disorder traits. *J Personal Disord*. 2017;31:193–207. [https://doi.org/10.1521/pedi\\_2016\\_30\\_251](https://doi.org/10.1521/pedi_2016_30_251).
294. Wright ZE, Pahlen S, Krueger RF. Genetic and environmental influences on Diagnostic and Statistical Manual of Mental Disorders-fifth edition (DSM-5) maladaptive personality traits and their connections with normative personality traits. *J Abnorm Psychol*. 2017;126:416–28. <https://doi.org/10.1037/abn0000260>.
295. Katz AC, Hee D, Hooker CI, Shankman SA. A family study of the DSM-5 section III personality pathology model using the Personality Inventory for the DSM-5 (PID-5). *J Personal Disord*. [https://doi.org/10.1521/pedi\\_2017\\_31\\_323](https://doi.org/10.1521/pedi_2017_31_323).
296. Lamkin J, Maples-Keller JL, Miller JD. How likable are personality disorder and general personality traits to those who possess them? *J Pers*. 2018;86:173–85. <https://doi.org/10.1111/jopy.12302>.
297. Hart W, Tortoriello GK, Richardson K. Are personality disorder traits ego-syntonic or ego-dystonic? Revisiting the issue by considering functionality in press. *J Res Pers*. 2018;76:124–8. <https://doi.org/10.1016/j.jrp.2018.08.001>.
298. Hart W, Tortoriello GK. The experience of benefit and impairment of personality disorder traits and personality disorder trait attitudes. *Personal Disord* in press. <https://doi.org/10.1037/per0000339>.
299. Meehan KB, Siefert C, Sexton J, Huprich SK. Expanding the role of levels of personality functioning in personality disorder taxonomy: commentary on “Criterion A of the AMPD in HiTOP”. *J Pers Assess* in press. <https://doi.org/10.1080/00223891.2018.1551228>.
300. Bornstein RF. From structure to process: on the integration of AMPD and HiTOP. *J Pers Assess* in press. <https://doi.org/10.1080/00223891.2018.1501696>.
301. Bender DS. The P-factor and what it means to be human: commentary on criterion A of the AMPD in HiTOP. *J Pers Assess* in press. <https://doi.org/10.1080/00223891.2018.1492928>.
302. Leising D, Scherbaum S, Packmohr P, Zimmermann J. Substance and evaluation in personality disorder diagnoses. *J Personal Disord*. 2018;32:766–83. [https://doi.org/10.1521/pedi\\_2017\\_31\\_324](https://doi.org/10.1521/pedi_2017_31_324).
303. Mulay AL, Cain NM, Waugh MH, Hopwood CJ, Adler JM, Garcia DJ, et al. Personality constructs and paradigms in the alternative DSM-5 model of personality disorder. *J Pers Assess*. 2018;100:593–602. <https://doi.org/10.1080/00223891.2018.1477787>.
304. Fossati A, Borroni S, Somma A, Markon KE, Krueger RF. Testing relationships between DSM-5 section III maladaptive traits and measures of self and interpersonal impairment in Italian community dwelling adults. *Personal Disord*. 2017;8:275–80. <https://doi.org/10.1037/per0000192>.
305. Podsakoff PM, MacKenzie SB, Podsakoff NP. Sources of method bias in social science research and recommendations on how to control it. *Annu Rev Psychol*. 2012;63:539–69. <https://doi.org/10.1146/annurev-psych-120710-100452>.
306. Ro E, Nuzum H, Clark LA. Antagonism trait facets and comprehensive psychosocial disability: comparing information across self, informant, and interviewer reports. *J Abnorm Psychol*. 2017;126:890–7. <https://doi.org/10.1037/abn0000298>.

307. Morey LC, Skodol AE. Convergence between DSM-IV-TR and DSM-5 diagnostic models for personality disorder: evaluation of strategies for establishing diagnostic thresholds. *J Psychiatr Pract*. 2013;19:179–93. <https://doi.org/10.1097/01.pra.0000430502.78833.06>.
308. Williams TF, Simms LJ. Personality traits and maladaptivity: unipolarity versus bipolarity. *J Pers*. 2018;86:888–901. <https://doi.org/10.1111/jopy.12363>.
309. Roberts BW, Luo J, Briley DA, Chow PI, Su R, Hill PL. A systematic review of personality trait change through intervention. *Psychol Bull*. 2017;143:117–41. <https://doi.org/10.1037/bul0000088>.
310. Bucher MA, Suzuki T, Samuel DB. A meta-analytic review of personality traits and their associations with mental health treatment outcomes. *Clin Psychol Rev*. 2019;70:51–63. <https://doi.org/10.1016/j.cpr.2019.04.002>.
311. Clark LA, Vanderbleek EN, Shapiro JL, Nuzum H, Allen X, Daly E, et al. The brave New World of personality disorder-trait specified: effects of additional definitions on coverage, prevalence, and comorbidity. *Psychopathol Rev*. 2015;2:52–82. <https://doi.org/10.5127/pr.036314>.
312. Hallquist MN, Wright AGC. Mixture modeling methods for the assessment of normal and abnormal personality, part I: cross-sectional models. *J Pers Assess*. 2014;96:256–68. <https://doi.org/10.1080/00223891.2013.845201>.
313. Wright AGC, Simms LJ. A metastructural model of mental disorders and pathological personality traits. *Psychol Med*. 2015;45:2309–19. <https://doi.org/10.1017/S0033291715000252>.
314. Kotov R, Krueger RF, Watson D, Achenbach TM, Althoff RR, Bagby RM, et al. The Hierarchical Taxonomy of Psychopathology (HiTOP): a dimensional alternative to traditional nosologies. *J Abnorm Psychol*. 2017;126:454–77. <https://doi.org/10.1037/abn0000258>.
315. Conway CC, Litzman RD, Krueger RF. A meta-structural model of common clinical disorder and personality disorder symptoms. *J Personal Disord in press*. [https://doi.org/10.1521/pedi\\_2019\\_33\\_383](https://doi.org/10.1521/pedi_2019_33_383).
316. Rosenström T, Gjerde LC, Krueger RF, Aggen SH, Czajkowski NO, Gillespie NA, et al. Joint factorial structure of psychopathology and personality. *Psychol Med in press*. <https://doi.org/10.1017/S0033291718002982>.
317. Krueger RF, Kotov R, Watson D, Forbes MK, Eaton NR, Ruggero CJ, et al. Progress in achieving quantitative classification of psychopathology. *World Psychiatry*. 2018;17:282–93. <https://doi.org/10.1002/wps.20566>.
318. Oltmanns JR, Smith GT, Oltmanns TF, Widiger TA. General factors of psychopathology, personality, and personality disorder: across domain comparisons. *Clin Psychol Sci*. 2018;6:581–9. <https://doi.org/10.1177/2167702617750150>.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.