DSM-5 section III personality traits and section II personality disorders in a Flemish community sample

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ABSTRACT

The Personality Inventory for DSM-5 (PID-5; Krueger et al., 2012) is a dimensional self-report questionnaire designed to measure personality pathology according to the criterion B of the DSM-5 Section III personality model. In the current issue of DSM, this dimensional Section III personality model co-exists with the Section II categorical personality model derived from DSM-IV-TR. Therefore, investigation of the inter-relatedness of both models across populations and languages is warranted. In this study, we first examined the factor structure and reliability of the PID-5 in a Flemish community sample (N=509) by means of exploratory structural equation modeling and alpha coefficients. Next, we investigated the predictive ability of section III personality traits in relation to section II personality disorders through correlations and stepwise regression analyses. Results revealed a five factor solution for the PID-5, with adequate reliability of the facet scales. The variance in Section II personality disorders could be predicted by their theoretically comprising Section III personality traits, but additional Section III personality traits augmented this prediction. Based on current results, we discuss the Section II personality disorder conceptualization and the Section III personality disorder operationalization.

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1. Introduction

The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5; APA, 2013) currently incorporates two systems for diagnosing personality disorders. Section II embodies the formal diagnostic system to-date and preserves the 10 categorical personality disorders as represented in DSM-IV-TR (APA, 2000), together with its merits and shortcomings. Section III represents conditions for further study and contains a new, hybrid model, developed by the DSM-5 Personality and Personality Disorder Workgroup in part to address the problems associated with the DSM-IV-TR categorical conceptualization. Indeed, numerous authors have favored a dimensional model to a categorical one, as empirical comparative tests invariably support a dimensional perspective (e.g., Livesley et al., 1994; Livesley, 2003; Trull and Durrett, 2005; Widiger and Mullins-Sweatt, 2005).

The Section III model conceptualizes personality disorders

through the use of both functional impairment criteria (criterion A), indicating the level of personality pathology, and descriptive/maladaptive personality dimensions (criterion B) that map onto the six categorical entities retained from the DSM-IV-TR. The six categorical personality disorder types retained in Section III include the Antisocial, the Borderline, the Narcissistic, the Schizotypal, the Avoidant, and the Obsessive-Compulsive personality disorder, each defined by specific impairments in personality functioning (according to criterion A), as well as by a specific constellation of personality traits (according to criterion B). For example, the Antisocial personality disorder is typified by the personality traits Manipulativeness, Deceitfulness, Callousness, Hostility, Irresponsibility, Impulsivity, and Risk Taking. Any other constellation of personality traits, in combination with at least moderate impairment in Self and Interpersonal functioning (criterion A) is diagnosed as a Trait-Specific personality disorder and is to be described by its most prominent descriptive features. As the APA Board of Trustees decided to include both the categorical (i.e., in Section II) and the dimensional (i.e., in Section III) model in the DSM-5, extensive research is warranted regarding both (1) the

Section III model as an emerging approach in need for further study, and (2) the relationship of this Section III model with the traditional Section II model.

Pertaining to research on the dimensional model as such, a large number of recent publications have provided support for the Personality Inventory for DSM-5 (PID-5; Krueger et al., 2012) as a reliable and valid measure of criterion B (e.g., Wright et al., 2012; Fossati et al., 2013; Zimmerman et al., 2014). The PID-5 is a self-report questionnaire comprised of twenty-five primary facet scales that represent the basic dimensional personality traits, grouping into five pathological higher-order domains that generally parallel the dimensions of the non-clinical Five Factor Model (FFM, Costa and McCrae, 1992): (1) Negative Affectivity (relating to FFM Neuroticism), (2) Detachment (inversely relating to FFM Extraversion), (3) Antagonism (inversely relating to FFM Agreeableness), (4) Disinhibition (inversely relating to Conscientiousness) and (5) Psychoticism (relating to Openness). The exact nature of the FFM – PID-5 relations has been widely researched and discussed (e.g., Thomas et al., 2012; De Fruyt et al., 2013; Gore and Widiger, 2013; Watson et al., 2013; Wright and Simms, 2014; Suzuki et al., 2015), with an ongoing debate on the lack of a strong association between FFM Openness and PID-5 Psychoticism in particular (e.g., Suzuki et al., 2015). Next to the replication of its factor structure, the convergent validity of the PID-5 has also been demonstrated within the realm of personality pathology models (e.g., Wright et al., 2012; Fossati et al., 2013; Zimmerman et al., 2014). Of particular interest are the findings by Anderson et al. (2013), showing a very close resemblance between the PID-5 domains and the Personality Psychopathology – Five model by Harkness and McNulty (1994). In the Dutch language, De Fruyt et al. (2013) confirmed the PID-5 factor structure in a Flemish college sample. Bastiaens et al. (2015) were able to replicate this factor structure in a Flemish clinical sample. In the current study, we first wanted to confirm the factor structure and reliability of the PID-5 as to-date we are unaware of existing data on this in a broad Flemish community sample, and as this represents a necessary step towards future clinical implementation.

Regarding the relationship between the DSM-IV-TR categorical conceptualization of personality disorders (as retained in DSM-5 Section II) and the DSM-5 Section III model, a 'cross-walk′ was originally constructed by the DSM-5 Personality and Personality Disorders Task Force and made available on the DSM-5 webpage prior to the publication of the DSM-5 manual (see Skodol et al., 2011). Hopwood et al. (2012) investigated the originally proposed alignment of the DSM-5 Section III personality traits and the six categorical personality disorders retained in Section III, by exploring associations between both concepts in a large undergraduate sample. They found that the DSM-5 Section III traits could predict the retained six categorical personality disorders they were conceptually assigned to. In a sample of Italian adult community volunteers, Fossati et al. (2013) showed that both PID-5 trait and domain scales explained a substantial amount of variance in Personality Diagnostic Questionnaire–4+scales. Anderson et al. (2014) extended the scope by investigating additional configurations of trait facets to the theoretically related ones, concluding that some potential revisions in the originally constructed cross-walk might be necessary. More recently, research has also focused on associations between specific personality disorders of the Section II and the Section III model (e.g., Skodol et al., 2014, regarding Narcissistic personality disorder; Few et al., 2015a, on Antisocial personality disorder; Sellbom et al., 2014, regarding Borderline personality disorder), or on the representation of other constructs in Section II and Section III (e.g., Few et al., 2015b, regarding impulsivity). As Fossati et al. (2013) and Anderson et al. (2014) advocate further research including a variety of cultural and linguistic contexts, current study intends to contribute to the

recommended cross–validation using a Flemish community sample. However, as a first conceptual caveat in advance, the dimensional approach was designed (and successfully tested) specifically to overcome the numerous shortcomings of the original categorical conceptualization, so the degree to which dimensional facet scales can predict categorical personality disorders cannot and should not be viewed as a validity test of the facet scales themselves. Rather, it represents an attempt to better understand 'true variance'-comorbidity between categorical personality disorders, as well as an investigation into the traits that uniquely delineate each of them. As a second conceptual caveat, the current study focuses on the investigation of the criterion B of the DSM-5 Section III model; it does not include the criterion A and therefore does not measure Section III in its entirety.

In summary, the current study had two aims. First, we sought to examine the factor structure of the Dutch version of the PID-5 in a community sample. To this end, we first investigated the unidimensionality of the PID-5 facet scales themselves. Subsequently, we corroborated the relations of the PID-5 facet scales to the higher-order domain structure, additional to the work of De Fruyt et al. (2013) in their college sample and our own work in a clinical sample (Bastiaens et al., 2015). Second, we sought to examine the relations between the DSM-5 Section II model and the criterion B of the Section III model within a Flemish community sample, in which, by use of correlations and stepwise hierarchical regression analysis, we aimed to investigate (1) to which degree DSM-5 Section II personality disorders could be predicted by the theoretically associated DSM-5/PID-5 personality traits, and (2) whether additional PID-5 facets could augment this prediction. For the six personality disorders retained in the DSM-5 Section III personality model, we used the provided trait profiles. For the remaining four personality disorders retained by the Section II model, we utilized the proposed 'cross-walk' prior to publication of the DSM-5, both in line with Anderson et al. (2014).

2. Methods

2.1. Participants and procedure

The sample was composed of 600 adult Flemish participants who volunteered to take part in the study. They were directly contacted by four psychology students who received closed envelops specifying the required socio-demographic variables (age, gender, and educational level) for each respondent, in order to obtain a population-representative sample in accordance with the data of the National Institute for Statistics (NIS). With respect to missing data, a maximum of 10% missing data per person and per scale was allowed, resulting in a sample size of 509. The remaining missing responses were imputed based on a regression per scale, by use of the multiple imputation method available in SPSS. Two hundred seventy seven respondents were female (54.4%) and 229 were male (45%), with gender information missing for three participants (0.6%). The mean age was 46.49 ($SD=18.54$; age information missing for five respondents). With data on educational level missing for nine participants (1.8%), 81 respondents (15.9%) finished Elementary School studies, 216 respondents (42.4%) finished High School studies, 147 respondents (28.9%) finished Community College studies, and 56 respondents (11%) finished University studies.

2.2. Instruments

The Personality Inventory for DSM-5 (PID-5; Krueger et al., 2012; Dutch translation by: De Clercq and colleagues) is a self-report questionnaire that consists of 220 items scored on a 4-point