Usefulness of the International Personality Disorder Examination screening questionnaire for borderline and impulsive personality pathology in adolescents

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Abstract

The aim of this study was to analyze the usefulness of the International Personality Disorder Examination Screening Questionnaire (IPDE-SQ) for identifying DSM-IV and ICD-10 Borderline and Impulsive personality disorders (PD) in Spanish adolescents.

Method: The DSM-IV and ICD-10 IPDE-SQ screeners were used and compared with the diagnoses obtained with the IPDE semistructured interview in a sample of 125 adolescents treated in a psychiatric department.

Results: For primary screening, the cutoff point with the best combination of sensitivity and specificity for ICD-10 impulsive and borderline PDs was obtained with three positive items, whereas for DSM-IV borderline the best PD cut-off was five positive items. For secondary screening, the best option would be one item above the cut-off points proposed for primary screening.

Conclusion: The 3-item cut-off point in the IPDE-SQ produces a high proportion of false positives on impulsive and borderline PDs in clinical adolescents. We propose several cut-off points, depending on whether the study is designed to perform primary or secondary screening.

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1. Introduction

Although the general topic of assessment of child and adolescent personality pathology is important and generally understudied, some clinical researchers and theorists have questioned the validity and stability of diagnosing personality disorders (PD) in these young populations who are undergoing highly fluid developmental processes and in whom diagnoses show only modest predictive validity and stability over time [1–4]. However, a growing body of literature on temperament and personality suggests that the main ingredients of adult PD are already present long before adolescence [5], and the underlying neurobehavioral systems in interaction with environmental forces partially configure the bases for PDs from early stages of life [6,7]. In clinical settings many adolescents meet criteria for PD; however, they are usually diagnosed and treated for Axis I disorders only, and the influence of Axis II disturbances is ignored. This omission may increase the risk of serious problems including substance abuse, delinquency, academic failure, social dysfunction, greater use of mental health services and related direct and indirect social costs [5,8,9].

Across the wide spectrum of adolescent psychopathology it is easy to find affective liability, a wide range of impulsive behaviors, and identity confusion among other internalizing or externalizing behaviors. Young people who present some of these characteristics often tend to idealize peers and promote close relationships with chaotic nuances [10,11].
Many of these issues can be grouped under Borderline Personality Disorder (BPD) which is manifested by complex, serious mental disturbances characterized by a pervasive pattern of instability in the regulation of emotion, interpersonal relationships, self-concept, and impulsive behaviors [12]. The BPD from neurobehavioral systems is characterized by a complex interaction of a decrease in positive emotion and an increase in negative emotion, diminished activity of the modulatory constraint system, and exaggerated reactivity of the fear system [7]; it also exhibits a deficient nonaffective constraint and salience that predict poor modulation of both cognitive and emotional systems [6,7].

Adolescents with BPD often meet criteria for multiple Axis I diagnoses [13], such as depression, bipolar disorder, conduct, disorders, attention deficit with hyperactive disorder and substance abuse [14,15]. The condition also shares relatively high comorbidity with other PDs in Axis II (cluster A, B and C), while the pattern of adult BPD comorbidity is limited more to cluster B [10,16]. This broad pattern of comorbid overlap found in adolescents suggests a more diffuse range of psychopathology in this population [13].

The emotionally unstable PD in the ICD-10 corresponds to BPD in the DSM-IV, and in the taxonomy published by the World Health Organization (WHO) it is divided into impulsive and borderline subcategories [17]. Whereas there is abundant literature on DSM BPD, the equivalent condition in the ICD-10 has seldom been studied [18], and relatively few studies on PDs have compared both (DSM and ICD) nosological taxonomies [19]. Further research into these subcategories is important, and differential characteristics have been demonstrated [20] such as more inpatient services related to BPD, higher rates of impulsive PD diagnosis in men, and higher rates of BPD diagnosis in women, more involuntary admissions for impulsive PD but a longer hospitalization in BPD, and different patterns of comorbid diagnosis: for instance, substance use disorders are related to impulsive PD, and affective or eating disorders related to BPD [18].

Several scales use screening tests for the identification of BPD [i.e. 21, 22]. One of them is the International Personality Disorder Examination Screening Questionnaire IPDE-SQ (BPD), which has been described as a reliable tool for screen PDs [23,24]. Nonetheless, there are no data on the sensitivity and specificity of the screening questionnaire vis-à-vis the IPDE interview in adolescent populations [A. W. Loranger, personal communication, February 3, 2012]. Generally, a screening test is used on a large scale (primary screening) to detect risk traits for a particular pathology, and secondary screening is sometimes used to assist clinical diagnosis. It is agreed that the cut-off point should be set as low as possible, but when it is used to assist clinical diagnosis the cut-off point should be raised [25].

The balance of sensitivity and specificity indicators should be as high as possible [26]. For these reasons, the optimal cut-off points for clinical and research contexts should be determined separately [27].

The purpose of this study was to assess performance in primary and secondary screening using different cut-off points on the IPDE-SQ for impulsive and borderline PDs, compared with IPDE diagnosis in a clinical sample of adolescents. The second aim was to explore the subthreshold influence of personality pathology (probable impulsive or borderline PD) in order to determine its impact [28] on the choice of the optimal cut-off point for this screener.

2. Method

2.1. Subjects

The group of patients was admitted and recruited at the Child and Adolescent Psychiatry and Psychology Department of an urban public general hospital. Inclusion criteria were age 15–18 years and being attended at our department; exclusion criteria were presence of mental retardation, and severe states of acute psychosis and acute depression.

One hundred and eighty-four patients met the above criteria. Thirty-nine refused to participate and twenty who did not complete the protocol assessment were excluded. Finally, 125 adolescents were analyzed. Psychiatric disorders were diagnosed using our department’s standard clinical interview and according to DSM-IV and ICD-10 criteria.

2.2. Instruments

2.2.1. Personality disorders interview

The official Spanish version [29] of the International Personality Disorder Examination (IPDE) developed by Loranger et al. [24] and adjusted for international use by the World Health Organization (WHO), is a semi-structured clinical interview for the examination of PD. The ICD-10 module consists of 67 semi-structured questions, each one of which assesses the presence or absence of ICD-10 PD criteria and calculates diagnoses for each PD. The DSM-IV version consists of 91 questions. Diagnoses using the criteria of both modules of the IPDE, the DSM-IV, and the ICD-10 were used in the present study.

The personality disorders measured by the IPDE begin on a continuum with normality, providing information regarding the number of criteria met for each PD, with three diagnostic decisions (positive, probable or negative). Each item is rated on a 3-point scale: absent = 0, present or accentuated degree = 1, and pathological or meets criterion = 2. In adolescent patients, a PD criterion is considered present if it has been pervasive and persistent for at least three years. For more information on the assessment and procedures see Magallón-Neri et al. [9].
2.2.2. Screening test

The IPDE has a screener version for each module (ICD-10 and DSM-IV) named the IPDE-SQ, developed by the WHO. The ICD-10 version consists of 59 true/false items, each of which addresses one criterion from the nine PD found in the ICD-10. The DSM-IV version consists of 77 true/false items, each of which addresses one criterion from the ten PD found in the DSM-IV. In previous studies the IPDE-SQ has demonstrated a specificity rate of 61% in a nonclinical population [23]. The standard manual suggests that if three or more items of a disorder are positive, the subject has failed the screen for this disorder and should be interviewed [29,30]. This cut-off is taken into account as baseline cut-off. The screen is merely intended to exclude those unlikely to receive a diagnosis if interviewed, and thus save clinicians or researchers time for proceeding with the interview [A. W. Loranger, personal communication, February 3, 2012].

2.3. Procedure

After a full explanation of study procedures, written informed consent was obtained from subjects and from their parents. The assessment was administered to the overall sample (n = 125) within the first three months of the subject’s referral to the department. The IPDE interviews (ICD-10 and DSM-IV) and the IPDE-SQ screening test (ICD-10 and DSM-IV) were performed during a period not longer than two weeks; the two screeners were applied on different days, and all the procedures were monitored by the research evaluation team comprising at least three senior consultants with more than 20 years of clinical experience. Discrepancies were resolved after a discussion involving the experts, thus giving more strength to the final diagnosis.

2.4. Statistics

First a preliminary calculation was made of the proportions for borderline and emotionally unstable PDs detected by the screening test (IPDE-SQ) and the clinical interview (IPDE). Also for each cut-off point, global indexes of sensitivity (SEN), specificity (SPE), and other descriptors of performance were also examined such as the positive predictive value (PPV), negative predictive value (NPV) and the hit rate. To explore the sub-threshold influence of the probable personality pathology in order to determine its impact on the choice of the optimal cut-off point for this screener, three contrast options [A] Positive versus negative PDs, B) Positive versus Negative + Probable PDs, and C) Positive + Probable versus Negative PDs] were used.

On finding the optimal cut-off point, the receiver operating characteristic (ROC) analysis was applied to determine the IPDE-SQ diagnostic performance (on ICD-10 Impulsive and Borderline PDs and DSM-IV borderline PD). ROC analysis was performed for each cut-off point to identify the ability of the test to discriminate between individuals with and without the PDs identified by IPDE. Statistical analyses were performed using SPSS 16.0.

The ROC curve assesses the predictive power of a test to determine the best cut-off point in making a diagnosis. It is based on two performance indexes of SEN and SPE which make up the test’s psychometric efficiency. The SEN index is the proportion of true positives among the total of patients, and the SPE index is the proportion of true negatives among the total of healthy individuals.

The area under the curve (AUC) reflects the test’s ability to discriminate between subjects who meet the illness criteria and those who do not. In the assessment the curves that show an AUC greater than 0.7 are preferred and confidence intervals are useful to assess differences between different ROC curves. Graphs provided by ROC curves illustrate the sensitivity on the vertical axis (Y) and the 1-specificity on the axis (X) corresponding to different cut-off points for evaluating different diagnostic tests. Comparing the resulting graphs we can observe and assess the test’s ability to classify each PD in each taxonomic model (ICD-10 or DSM-IV).

There are two essential aspects to consider in choosing an optimal cut-off point: the prevalence of the disorder in the sample, and the severity of considering into sampling the false negatives and the false positives.

To choose the optimal cut-off point, two criteria were initially considered: I) a weighted combination of SEN and SPE and II) an overall hit rate of correctly classified subjects. Also it has been important to consider the same critical impact to obtain a false negative related to infra-therapeutic clinical assistance, such as a false positive related to a possible stigmatization effect for the assignment of the clinical label of PD.

3. Results

Most of the patients were female (83%) with a mean age = 15.9 years, SD = 0.9. All participants had at least one Axis I psychiatric disorder. The distribution of clinical diagnoses was as follows: 18.4% mood disorders, 12.8% anxiety disorders, 16.0% disruptive disorders (attentional deficit hyperactive disorder, conduct disorder, oppositional defiant disorder), 10.4% substance use disorders, 12.8% adjustment disorder, 5.6% psychotic disorder and 70.2% eating disorders.

The proportion of cases which screened positive for a possible diagnosis of BPD identified by the IPDE-SQ (for a cut-off point of 3 or above) for ICD-10 impulsive PD was 44% whereas the IPDE interview identified only 13.6%. Differences between these proportions (z score = 4.88; p < .001) were significant. For ICD-10 borderline PD, the IPDE-SQ identified 37.6% and the IPDE interview 8.8%. Differences between these proportions were also significant (z score = 5.21; p < .001). For DSM-IV borderline PD, the screener detected 71.2%, and the IPDE interview 12.8%, the difference between these proportions being significant (z score = 9.24; p < .001). A notably high rate of false
positives was observed with a cut-off point set at 3, ranging between 29% and 59% depending on the type of PD evaluated. Regarding probable diagnosis of PD the IPDE interview detected 9.6% of impulsive, 6.4% of ICD-10 borderline, and 8.0% of DSM-IV borderline.

Table 1 shows the different indexes calculated (SEN, SPE, PPV, NPV, and hit rate) for each cut-off point corresponding to ICD-10 impulsive PD and borderline PD (BPD) and to DSM-IV BPD with each of the three contrast options [A] Positive versus negative, B) Positive versus Negative + Probable, and C) Positive + Probable versus Negative]. The optimal cut-off point for primary screening in impulsive PD was set at 3 or above, with an overall true classification of between 61.6% and 68% of agreement. With the cut-off point of 3, BPD ICD-10 had an average agreement between 68.8% and 73.6%. Finally, the BPD DSM-IV showed a better substantial classification when the cut-off point was set at five positive items, showing an overall correct classification between 68.9% and 74.4%. With this cut-off point of 5 DSM-IV BPD performed better than the ICD-10 PDs baseline cut-off point. Option C, in which the cut-off point of 5 DSM-IV BPD was maintained, was regularly the best option. Moreover, we assessed the rate of correctly classified subjects (hit rate), noting percentage differences between cutoff points (upper and lower) which are represented by the largest jump in the proportional hit-rate identified regarding the following cutoff. In the case of ICD-10 PDs, a cutoff point of 3 was the best solution. However, in the DSM-IV Borderline PD

For primary screening, although the cut-off point was increased to 5 in DSM-IV BPD the percentage of identification on the IPDE-SQ was 43.2%, a significant difference was maintained (z score = 4.970; p < .001) with respect to BPD identified by the IPDE interview (12.8%, Table 2).

On the other hand, if we aim for an overall success rate of 75% or above, as one would expect in secondary screening for diagnosis, the suggested cut-off point would be 4 in ICD-10 Impulsive and Borderline PDs and 6 in DSM-IV BPD. The identification of cases that screened positive for a possible diagnosis of PDs on the IPDE-SQ would have fallen considerably with respect to the percentages presented in primary screening, but would have maintained significant differences (p < .05) with respect to those identified by the IPDE interview.

![ROC curves](image_url)

**Fig. 1** describes ROC curves by considering the three contrast options. Option A by considering only positives and negatives [curves a), b), c)]. Option B by considering the probable PD within the negative PD group [curves d), e), f)]. Option C by considering the probable PD within the positive PD group [curves g), h), i)]. This grid shows the resulting options, and the best calculated option. Practically all AUC values for Impulsive PD are equivalent, but the best one (see

<table>
<thead>
<tr>
<th>Cut-off point</th>
<th>Option A Positive vs. Negative</th>
<th>Option B Positive vs. Negative + Probable</th>
<th>Option C Positive + Probable vs. Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impulsive PD ICD-10</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; = 1</td>
<td>1.00, 0.10, 0.17, 1.00, 23.8</td>
<td>1.00, 0.09, 0.15, 1.00, 21.6</td>
<td>1.00, 0.10, 0.25, 1.00, 31.2</td>
</tr>
<tr>
<td>&gt; = 2</td>
<td>1.00, 0.32, 0.21, 1.00, 42.4</td>
<td>1.00, 0.30, 0.18, 1.00, 39.2</td>
<td>0.97, 0.32, 0.30, 0.97, 47.2</td>
</tr>
<tr>
<td>&gt; = 3</td>
<td>0.71, 0.66, 0.27, 0.93, 66.3</td>
<td>0.71, 0.60, 0.22, 0.93, 61.6</td>
<td>0.76, 0.66, 0.40, 0.90, 68.0</td>
</tr>
<tr>
<td>&gt; = 4</td>
<td>0.52, 0.83, 0.36, 0.91, 78.7</td>
<td>0.53, 0.80, 0.29, 0.91, 76.0</td>
<td>0.53, 0.83, 0.50, 0.85, 76.2</td>
</tr>
<tr>
<td>&gt; = 5</td>
<td>0.18, 0.98, 0.60, 0.87, 85.8</td>
<td>0.18, 0.96, 0.43, 0.88, 85.6</td>
<td>0.17, 0.98, 0.71, 0.80, 79.2</td>
</tr>
<tr>
<td><strong>Borderline PD ICD-10</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; = 1</td>
<td>1.00, 0.19, 0.11, 1.00, 26.5</td>
<td>1.00, 0.17, 0.10, 1.00, 24.8</td>
<td>1.00, 0.19, 0.18, 1.00, 31.2</td>
</tr>
<tr>
<td>&gt; = 2</td>
<td>0.91, 0.43, 0.14, 0.98, 47.8</td>
<td>0.91, 0.40, 0.13, 0.98, 44.8</td>
<td>0.95, 0.43, 0.23, 0.98, 51.2</td>
</tr>
<tr>
<td>&gt; = 3</td>
<td>0.82, 0.72, 0.23, 0.97, 72.6</td>
<td>0.82, 0.67, 0.20, 0.97, 68.8</td>
<td>0.84, 0.72, 0.35, 0.96, 73.6</td>
</tr>
<tr>
<td>&gt; = 4</td>
<td>0.45, 0.89, 0.31, 0.94, 85.5</td>
<td>0.45, 0.86, 0.24, 0.94, 82.4</td>
<td>0.53, 0.90, 0.48, 0.91, 84.0</td>
</tr>
<tr>
<td>&gt; = 5</td>
<td>0.09, 0.97, 0.25, 0.91, 88.9</td>
<td>0.09, 0.96, 0.20, 0.92, 88.8</td>
<td>0.10, 0.97, 0.40, 0.86, 84.0</td>
</tr>
<tr>
<td><strong>Borderline PD DSM-IV</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; = 1</td>
<td>1.00, 0.09, 0.15, 1.00, 21.7</td>
<td>1.00, 0.08, 0.14, 1.00, 20.0</td>
<td>1.00, 0.09, 0.22, 1.00, 28.0</td>
</tr>
<tr>
<td>&gt; = 2</td>
<td>1.00, 0.20, 0.17, 1.00, 31.3</td>
<td>1.00, 0.18, 0.15, 1.00, 28.8</td>
<td>1.00, 0.20, 0.26, 1.00, 37.8</td>
</tr>
<tr>
<td>&gt; = 3</td>
<td>1.00, 0.34, 0.20, 1.00, 43.4</td>
<td>1.00, 0.32, 0.20, 1.00, 41.7</td>
<td>0.96, 0.34, 0.28, 0.97, 47.2</td>
</tr>
<tr>
<td>&gt; = 4</td>
<td>1.00, 0.58, 0.28, 1.00, 63.5</td>
<td>1.00, 0.54, 0.24, 1.00, 60.0</td>
<td>0.92, 0.58, 0.36, 0.97, 64.8</td>
</tr>
<tr>
<td>&gt; = 5</td>
<td>1.00, 0.70, 0.35, 1.00, 73.9</td>
<td>1.00, 0.64, 0.31, 1.00, 68.9</td>
<td>0.92, 0.70, 0.44, 0.97, 74.4</td>
</tr>
<tr>
<td>&gt; = 6</td>
<td>0.75, 0.81, 0.39, 0.95, 80.0</td>
<td>0.75, 0.76, 0.32, 0.95, 76.0</td>
<td>0.73, 0.81, 0.50, 0.92, 79.2</td>
</tr>
<tr>
<td>&gt; = 7</td>
<td>0.44, 0.87, 0.35, 0.91, 80.8</td>
<td>0.44, 0.84, 0.29, 0.91, 79.2</td>
<td>0.42, 0.87, 0.46, 0.85, 77.6</td>
</tr>
<tr>
<td>&gt; = 8</td>
<td>0.19, 0.95, 0.38, 0.88, 84.3</td>
<td>0.19, 0.95, 0.38, 0.89, 85.6</td>
<td>0.12, 0.95, 0.38, 0.80, 77.6</td>
</tr>
<tr>
<td>&gt; = 9</td>
<td>0.00, 0.99, 0.00, 0.86, 85.2</td>
<td>0.00, 0.99, 0.00, 0.87, 86.4</td>
<td>0.00, 0.99, 0.00, 0.79, 78.4</td>
</tr>
</tbody>
</table>

PD = Personality disorder; * = primary screening; † = secondary screening.
Table 2
Proportion of cases screened for possible PDs based on cut-off points at baseline and in primary and secondary screening with the IPDE-SQ, and definite diagnosis by the IPDE interview.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Impulsive PD ICD-10 N(%)</th>
<th>Borderline PD ICD-10 N(%)</th>
<th>Borderline PD DSM-IV N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPDE-SQ Baseline</td>
<td>55(44.0)</td>
<td>47(37.6)</td>
<td>89(71.2)</td>
</tr>
<tr>
<td>IPDE-SQ Primary screening</td>
<td>55(44.0)</td>
<td>47(37.6)</td>
<td>54(43.2)</td>
</tr>
<tr>
<td>IPDE-SQ Secondary screening</td>
<td>31(24.8)</td>
<td>21(16.8)</td>
<td>38(30.4)</td>
</tr>
<tr>
<td>IPDE Interview positive diagnosis</td>
<td>17(13.6)*</td>
<td>11(8.8)*</td>
<td>16(12.8)*</td>
</tr>
</tbody>
</table>

* = cut-off points set at 3 for all three PDs studied.
  b = cut-off points set at 3 for impulsive and borderline ICD-10 PDs and 5 in BPD DSM-IV.
  c = cut-off points set at 4 for impulsive and borderline ICD-10 PDs and 6 in BPD DSM-IV.
  p < 0.05 proportion tests differences between positive diagnosis and primary or secondary screening.

curves g) is obtained when positive and probable diagnoses are considered together jointly versus Negative PDs (AUC = .772). The same tendency also appeared for ICD-10 BPD (AUC = .829), as can be seen in curve h. In contrast, no great differences were observed between the three DSM-IV BPD solutions and practically all were equivalent; the best solution was to consider only positive and negative PDs (AUC = .859), as can be seen in curve c. Finally, the worst AUC solution in ICD-10 impulsive and borderline PDs was the one that considered probable PD in the negative PD group (option B).

4. Discussion

This study follows the line of others that have investigated the performance of screening instruments for the borderline or emotionally-unstable personality pathology [19,22] in the adolescent clinical population [21]. Distinctive features of the current study are the use of assessment modules DSM-IV and ICD-10 for personality pathology as Ottosson et al. [19], and the assessment of the impact of these disorders in subjects with sub-threshold personality pathology that is classified as “probable PD”.

The study confirms a better performance with cutoff points set at 3 for the ICD-10 impulsive and borderline PDs, suggested by the original authors of the IPDE and ratified in community and clinical population studies [23,24,30]. On the other hand, it states that the DSM-IV Borderline PD performed better with the IPDE-SQ cutoff of five positive items.

When setting the parameters for the choice of the cutoff point, there was a dilemma in choosing the criteria to assess optimal performance. The impact on the diagnostic decision for both false positives (FP) and false negatives (FN) was evaluated with the same proportion, suggesting two possible solutions. The choice of a low cutoff would produce a tendency towards a higher rate of FP and involve a higher investment of resources in diagnostic evaluation which would prove unnecessary in some cases, and also possibly generating a stigma effect in the treatment of adolescents identified with a PD. On the other hand, a high cutoff choice would tend to classify more subjects as FN, assuming that people possibly affected with personality pathology did not receive assistance, leading to a concealment of the influence of the pathology associated with PD [9] and reducing the effectiveness of the therapeutic intervention. The diagnostic decisions have cascading effects on subsequent treatment decisions and can be linked to underlying level of latent PD pathology [28]. Therefore, to establish the selection criteria we decided to consider both serious options (FP and FN).

The cutoffs for primary screening differ slightly from the optimal cutoff identified by Chanen et al. [21] for the IPDE-SQ in DSM-IV BPD, which placed it at 6 points. It should be borne in mind that if the cutoff was set at 2 for ICD-10 PDs and 4 for DSM-IV BPD, the overall hit rates would have been regarded as poor. On the other hand, increasing the cutoff for ICD-10 PDs to 4 and for the DSM-IV BPD to 6 would bring down the SEN index significantly, and its ability to identify people around the threshold would be affected. These data as a whole provide support for the cutoff points for primary screening proposed [26] — 3 for ICD-10 Impulsive and Borderline PDs, and 5 for DSM-IV BPD.

For secondary screening, the suggested cut-off points coincided with the previous results proposed by Chanen et al. [21]. In this case the optimal combination of SEN and SPE is not the best index to determine the cutoff point for identifying Impulsive or Borderline PDs with the IPDE-SQ in the clinical teenage population, because if the baseline cutoffs are assumed to be optimal, a high rate of FP would be obtained and many patients would be overidentified as positive cases. Ottosson et al. [19] propose several ways to reduce this problem, for instance raising the threshold for the number of criteria required, or assessing the individual’s impairment or distress. We propose setting SPE above 0.75 and this is possibly the best criterion for patients in the clinical population, as it provides a more accurate clinical assessment.

In relation to the three classification systems used in each PD, the worst is the one that considers subjects with a probable involvement of personality pathology as negative (option B). However, this impact is not significant for any PD (ICD-10 or DSM-IV), but there are slight differences and losses of sensitivity when probable PDs are considered as
negative. The fact that the sample shows a small number of people with probable PD may have contributed to the failure to obtain significant differences. However, if the assessment of each individual is made according to overall personality pathology, we may find a greater proportion of probable PD, and this could play a more important role than the one currently displayed. Faced with the choice of classification of a person with probable personality pathology the clinical recommendation would be to assign him or her to a more comprehensive assessment, using semi-structured interviews for a reliable assessment of PD and co-occurring Axis I disorders [12].

Fig. 1. ROC Curves for Impulsive and Borderline PDs in ICD-10 and Borderline PD in DSM-IV. Option A: A), B), C) = Only Positive vs. Negative PDs. Option B: D), E), F) = Considering Positive vs. Negative + Probable PDs. Option C: G), H), I) = Considering Positive + Probable vs. Negative PDs. AUC = Area under the curve. CI = Confidence Interval.
Finally, although in the case of DSM-IV BPD the cutoff increased moderately, the rate of identification of PD assessed by the IPDE-SQ still differs significantly from that identified by the semi-structured interview. In common with other studies [21] we feel that screening instruments are useful for identifying trends in personality pathology, but can by no means replace the diagnosis process itself, and are definitely not interchangeable.

The main strength of this study is that it provides two different cut-off points for primary and secondary screening for personality disorders in the adolescent clinical population for two independent clinical taxonomies. It also details data on the sensitivity and specificity and hit rate of the screening questionnaire vis-à-vis the IPDE interview, an issue has not been studied to date [A. W. Loranger, personal communication, February 3, 2012]. The study has a number of limitations that should be noted in order to interpret the results. First, the sample size is small compared with community studies, although it is similar to that commonly found in clinical samples. In addition, females with eating disorders are overrepresented. Nevertheless, the age range of the study sample is compact and homogeneous, suggesting that these data could be applied in groups with similar characteristics. In order to extend these results, they could be evaluated using decision theory and considered from different perspectives — from the perspectives of patients and health providers, but also in social or clinical research contexts [27].

5. Conclusions

The IPDE-SQ cut-off points for primary screening of ICD-10 impulsive and borderline PDs are the ones proposed in the official manual. Those of DSM-IV BPD should be increased to 5. For secondary screening, cut-off points of 4 for ICD-10 impulsive and borderline PDs and 6 for DSM-IV BPD are likely to provide a more accurate clinical assessment.

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References

established in 1998, the International Personality Disorder Examination Questionnaire (IPDEQ) was developed.


