ORIGINAL ARTICLE

Validation of two informant-based screening instruments for personality disorders in a psychiatric outpatient population

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Abstract

Purpose: The predictive validity of two informant-based screening instruments for personality disorders (PDs), the Standardized Assessment of Personality (SAP) and a short eight-item version (SAPAS-INF), were studied in 103 Dutch psychiatric outpatients, using the SCID-II as the 'gold standard'.

Methods: All patients and their informants were interviewed separately and independently by different interviewers who were unaware of the results in the other conditions.

Results: According to the SCID-II, 66 patients had at least one personality disorder (PD). The SAP correctly classified 72% of all participants in the category PD present/absent. The sensitivity and specificity were 69% and 76%, respectively. The positive and negative predictive values were 84% and 58%. The SAPAS-INF, using a cut-off score of 3, correctly classified 70%; the sensitivity and specificity were 76% and 58%, respectively. The positive and the negative predictive values were 77% and 57%.

Conclusion: These results show that the informant-based SAP as well as the shorter informant-based SAPAS-INF are adequate; though rather moderate screening instruments for identifying PD. The SAP and the SAPAS-INF, however, both performed worse than the SAPAS-SR, which is based on the patient's self-report. Therefore, it is concluded that the SAP or the SAPAS-INF can be used as a satisfactory screening instruments for the presence/absence of PD in those cases where patients themselves are unable to provide the required information.

Key words

Personality disorders, Screening, Informant-based instruments

1 Background

In Western countries, the median prevalence for personality disorders (PDs) is 13% for general populations, 50% for outpatient populations and 70% for inpatient and forensic populations [1, 2]. Early recognition of these frequently occurring PDs is extremely important, because they cause serious psychosocial problems and can hinder the course and the treatment of psychiatric disorders [3-5]. Since comorbid PDs can adversely affect the management of mental illnesses, assessment of the personality status of patients should be an essential part of every psychiatric examination [6, 7]. Although not perfect, standardized clinical interviews are generally considered to be the most reliable and valid methods for the assessment of PDs [8]. However, quite often performing such an interview is very time consuming. Moreover, it can be exhausting for the patient. Additionally, self-report questionnaires can be useful research tools, particularly when employed as part of a two-stage design for case identification [9]. However, self-report questionnaires generally have poor specificity and can also be tiring for patients, as they require the ability to concentrate on written questions. A third approach is to conduct a brief structured interview that is incorporated into a standard psychiatric interview. Several short, structured interviews have been developed. Internationally, the most frequently used instruments are the Rapid Personality Assessment Schedule, the Iowa Personality Disorder Screen, and the Standardised Assessment of Personality-Abbreviated Scale [10-14].

All of the instruments mentioned above employ the same source of information, namely the patient. Consequently, these instruments extract rather limited information about patient functioning. The quality of the data collected is very much dependent on the capability and willingness of the patient to provide a factual picture and truthful report. Part of the problem is that sometimes patients, due to an abnormal mental state, cannot give a trustworthy account. The symptoms of a PD reflect how people act in different situations and how they interact with their continuously changing environment [8]. This raises the question as to whether patients with a PD are able to have an understanding and sound grasp of their own social and interpersonal functioning. A solution could be a screening instrument with one or more informants as the source of information.

The Standardised Assessment of Personality (SAP) is an informant-based interview that has been extensively examined with respect to its psychometric qualities [15-17]. It has good inter-rater and inter-informant reliability [18]. It is possible to conduct the interview face-to-face, but it can also be performed by telephone.

The major aims of this study were to examine the usefulness of the full-length SAP as well as a much shorter SAP-based instrument, the SAPAS-INF, as screening instruments for the SCID-II interview, which was used as the 'gold standard' for diagnosing PD [19]. Furthermore, our goal was to examine the level of agreement between the two informant-based instruments (SAP and SAPAS-INF). Finally, the study's aim was to examine which informants provided the most valid information and could, therefore, be best utilised.

2 Methods

2.1 Site and participants

This study was conducted at GGZ Midden-Brabant, a community mental health centre (CMHC) in Tilburg, The Netherlands. The study was approved by the Regional Medical Ethical Committee. From all patients (n=4232) referred to this CMHC from January 2008 to October 2009, 172 patients who were not currently in treatment and were therefore in the first diagnostic phase, were randomly recruited for initial evaluation. Only literate patients of Dutch origin were included. Forty-three patients (25.0% of the total, 20 men and 23 women; mean age=31.1 years) refused to participate. The remainder of the group provided informed consent. Twenty-seven patients (f15.5 % of the total, 7 men and 20 women; mean age=36.0 years) were excluded, because they did not return after the first assessment. As a result, the final study group consisted of 102 patients (41 men (40.2%) and 61 women (59.8%); mean age=33.7 years (SD=9.9)). Some participants reported a history of psychiatric hospitalisation (n=8; 7.8 %) or outpatient treatment (n=48; 46.6 %).

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2.2 Instruments

2.2.1 SCID-II

The SCID-II interview covered the complete set of PDs listed in the DSM-IV-TR as well as the passive-aggressive and depressive PDs listed in the appendix of the DSM-IV-TR [20-22]. The SCID-II interview contains two parts: eight open-ended questions regarding the patient's general behavior, interpersonal relationships, and self-reflective abilities, followed by 140 items scored as 1 (*absent*), 2 (*sub-threshold*), or 3 (*threshold*). This instrument is primarily designed to yield categorical diagnoses of PDs. The inter-rater reliability and internal consistency are adequate [23-25]. The psychometric properties of the Dutch version are fair to good [26]. The inter-rater reliability ranged from 0.77 for the obsessive-compulsive PD to 0.82 for the avoidant PD. The overall Kappa was 0.80 [27]. These figures are comparable to the associations obtained in the study of Masthoff and Trompenaars, who found an overall Kappa of 0.87 for two well-trained and certified raters in a large sample of psychiatric outpatients [28]. Because the second phase was performed by only one well-trained and certified interviewer, this type of reliability could not be calculated in the present study. Before undertaking the fieldwork for this study, the researchers (S.G., J.K., D.E., H.K.), all psychiatrists, were formally trained in the use of the SCID-II.

2.2.2 The standardized assessment of personality (SAP)

The Standardized Assessment of Personality is a brief semi-structured interview with an informant that can be conducted face-to-face or by telephone [15]. The informant should have known the patient for at least five years. Research using the SAP has indicated that female informants with a relatively long acquaintance to the patient provide data that shows the highest level of inter-rater and inter-temporal reliability [18]. An opening sequence of 13 questions by the informant may suggest particular keywords, which, in turn, lead to different categories of PD. This will happen by asking questions in order to find out whether sufficient criteria have been met and whether there is ample evidence for these criteria to point to the presence of a distress or handicap. If no keywords appear in the 13-item introduction phase, the interview is terminated and no PD is assumed.

The interview takes approximately 10 to 20 minutes. The average overall inter-rater reliability (Cohen's Kappa) for the SAP is 0.76 with a range from 0.60 to 0.82 [18]. The inter-informant reliability varies from 0.96 to 0.93 [29]. The positive and negative predictive values of the SAP, with the International Personality Disorder Examination used as the 'gold standard' were 47% and 97%, respectively [30-31]. It was concluded that the SAP is a potentially adequate screening instrument in a two-phase approach in the epidemiological assessment of PD.

Since no Dutch version of this instrument was available at the time of this study, the original version of the SAP was translated into the Dutch language by the authors and translated back into English by the translation centre of Tilburg University.

2.2.3 SAPAS-INF

The authors translated the items of the original SAPAS, a structured interview, and created a self-report questionnaire, the SAPAS-SR [12, 19]. The original SAPAS consists of eight dichotomously rated items, which the original authors had taken from the opening section of the informant-based semi-structured interview, the Standardised Assessment of Personality [15, 31]. Scores on the SAPAS ranged from 0 to 8. The alpha coefficient for the total score of the SAPAS was 0.68. Employing a cut-off score of three on the SAPAS correctly classified over 80% of the patients with a sensitivity of 0.94 and a specificity of 0.85 [12]. The SAPAS-SR is also an instrument with eight items that measure three broader domains, reflecting personality disorders in clusters A, B and C. Psychometric properties were studied, showing a test-retest coefficient of 0.89 for the total score. As demonstrated by factor analysis, these three domains account for 53.8% of the total variance. When using a cut-off score of four, the SAPAS-SR correctly classified 81% of the subjects, while showing a sensitivity of 0.83 and a specificity of 0.80. This is slightly lower than the findings in the original English

version [19]. The authors transformed the Dutch SAPAS-SR into a structured interview for informants (SAPAS-INF) by changing the questions in the questionnaire from using "you" to using the name of the patient as the only adjustment.

2.3 Procedure

The SAP and the SAPAS-INF were conducted as face-to face interviews with an informant in a routine standardised diagnostic process. Patients received extensive written information regarding the study and were asked, in the letter as well as personally, to bring along an informant to the next session. One of the researchers conducted the SCID-II interview and had access to all the information that was in the patient's file. Another researcher conducted the semi-structured SAP interview, followed by the fully structured SAPAS-INF interview. This particular order was chosen because it excluded the possibility of SAPAS-INF information being used in the initial phase of the SAP interview. This researcher did not have access to earlier obtained information concerning the patient.

2.4 Analysis

All statistical analyses were performed with SPSS version 12 (SPSS Inc., Chicago, IL). Analyses were conducted regarding the absence and presence of PD and the identification of different PD categories. Weighted Kappa [32] was used to assess the agreement of the classification systems. Kappa's below 0.40 reflected low agreements; between 0.40 and 0.59, moderate; between 0.60 and 0.79, good; and higher than 0.80 reflect excellent agreement [33].

The effect of changing cut-off scores on the SAPAS-INF in predicting a SCID-II (DSM-IV) diagnosis of PD was examined using a receiving operating characteristic (ROC) analysis. To assess the sensitivity and specificity of various cut-off scores, a sensitivity and specificity plot was constructed.

The estimation of the number of participants to be included was based on an article by Maxwell entitled, "Sample Size and Multiple Regression Analysis" [34]. Maxwell showed that the rule of thumb that had been used traditionally, for example by Cohen, needed to be significantly refined. In the study, the regression analysis is based on two predictors per analysis: one screening-instrument and one variable of personality disorder. Based on Table 5 from the Maxwell article, to achieve a power of 80% with an alpha of 0.05 and a medium correlation between predictors, a minimum of 141 subjects were needed.

3 Results

Sixty-six of the 102 patients received a SCID-II diagnosis, yielding a prevalence of PDs of 64.7%. The mean number of PD diagnoses among those with any PD was 2.2 (SD=1.2). The SAP identified 55 patients with PDs (54%) in the sample. Table 1 gives an overview of the categories of informants. (See Table 1)

Table 1. Information about the informants and correlation with the SCID-II and the SAP for any PD

Informants	N (%)	Correctly classified %
Men	41 (40.2)	73.2
Women	61 (59.8)	70.5
Partner	56 (54.9)	73.2
Direct family	36 (35.3)	75.0
Friend	10 (9.8)	50.0
Duration of the relationship		
<5 year	23 (22.3)	78.3
5-15 years	23 (22.3)	70.0
>15 years	56 (55.4)	70.0

No significant difference between the performance of male and female informants was found. Additionally, there was no significant difference between partner and family members. Friends were less able to classify the patient properly, but there were only ten friends in the sample and in all ten cases, the patient had a PD. The mean duration of the relationship

with the informants was 17.5 years (SD=13.0). The duration of the relationship with the patient was categorized as follows: less than five years, between five years and 15 years, and more than 15 years. There were no significant differences between these categories with respect to correctly classifying the caseness of PD.

Table 2. Sensitivity, Specificity and The Power to Predict personality disorder of the Standardised Assessment of Personality (SAP)

	Sensitivity	Specificity	PPV	NPV	Correctly Classified
Cluster A					
Paranoid	0.27	0.91	0.33	0.88	0.81
Schizoid	-	-	-	-	1.0
Schizotypal	-	-	-	-	1.0
Cluster B					
Borderline	0.76	0.92	0.76	0.92	0.88
Histrionic	0	0.96	0	0.97	0.93
Narcissistic	0	0.98	0	0.95	0.93
Antisocial	0.50	0.93	0.36	0.96	0.89
Cluster C					
Avoidant	0.43	0.83	0.52	0.78	0.72
Dependent	0.33	0.96	0.33	0.96	0.92
Obsessive-Compulsive	0.35	0.93	0.54	0.85	0.84
Personality Disorder NOS*	0.72	0.52	0.33	0.85	0.57
Any personality diagnosis	0.69	0.76	0.84	0.58	0.72

Table 2 shows the sensitivity, specificity, power to predict, and the percentage of correct classifications (any PD) for the SAP. (See Table 2)

Table 3. Number of patients identified by the SAP and the SCID-II with each DSM-IV TR category of PD and level of agreement

	SCID-II (%)	SAP Hit	No hit	Kappa
Cluster A				
Paranoid	15 (14.7)	4	0	0.19
Schizoid	0 (0)	0	0	-
Schizotypal	0 (0)	0	0	-
Cluster B				
Borderline	25 (24.3)	19	6	0.68
Histrionic	3 (2.9)	0	3	0.04
Narcissistic	5 (4.9)	0	5	0.03
Antisocial	8 (7.8)	4	4	0.36
Cluster C				
Avoidant	30 (29.1)	13	17	0.28
Dependent	6 (5.9)	2	4	0.29
Obsessive-Compulsive	20 (19.4)	7	13	0.32
Personality Disorder NOS*	25 (24.5)	18	7	
Any personality diagnosis	66 (64.7)	46	20	0.43

The sensitivity and the specificity for any PD are 0.69 and 0.76, respectively. The positive predictive value (PPV) and the negative predictive value (NPV) were 0.84 and 0.58 for any PD. The SAP correctly classified 72% of the patients for

caseness. The SAPAS-INF, which takes less time, has a sensitivity of 0.76, a specificity of 0.58, a PPV and a NPV of 0.77 and 0.57, respectively. The SAPAS-INF correctly classified 70% of the patients for having any PD.

Table 3 shows the level of agreement (Kappa) and the hit and no-hit cases between the SAP and the SCID-II for the various PD categories. (See Table 3)

The Kappa was between 0.03 for the narcissistic PD and 0.68 for the borderline PD. The overall Kappa was a moderate 0.43.

Table 4 shows the screening potential of the SAP and the SAPAS-INF with a cut-off point of three (SAPAS-INF3) with the original English cut-off score of the SAPAS and with a cut-off score of four used for the Dutch SAPAS-SR [19]. (See Table 4)

Table 4. Sensitivity, specificity, and the power to predict personality disorder for the different screening instruments

Instrument	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Correctly Classified (%)
SAP	0.69	0.76	0.84	0.58	0.72
SAPAS-SR †	0.83	0.80	0.80	0.82	0.81
SAPAS-INF3 ††	0.76	0.58	0.77	0.57	0.70
SAPAS-INF4 †††	0.52	0.78	0.81	0.47	0.60

Note: † SAPAS-SR=Self-report Standardized Assessment of Personality- abbreviated Scale. Germans et al., 2009; †† SAPAS-INF3=Standardized Assessment of Personality- abbreviated Scale with the original cut-off of 3; ††† SAPAS-INF4=Standardized Assessment of Personality- abbreviated Scale with the Dutch SAPAS-SR cut-off of 4.

4 Discussion

The major aims of this study were to examine the usefulness of the full-length SAP as well as a much shorter SAP-based instrument, the eight-item SAPAS-INF, as screening instruments for the SCID-II interview. Furthermore, our goal was to examine the level of agreement between the two informant-based instruments (SAP and SAPAS-INF). Finally, the study's aim was to examine which informant provided the most valid information and could, therefore, be best utilised.

The results showed that the informant-based SAP as well as the shorter informant-based SAPAS-INF were adequate, though rather moderate, screening instruments for identifying PD. However, the SAP and the SAPAS-INF both performed worse than the SAPAS-SR, which is based on the patient's self-report.

Psychiatric patients, especially patients with borderline PF have the tendency to drop out of their therapeutic treatment. Still, their behaviour can cause problems for their surroundings, and there is a need for diagnosing (and initiating possible treatment to) the patients without the patient present [35].

In addition, patients with PF have a greater chance to be diagnosed with comorbid illnesses like paranoia and psychosis. If the patient is in such a condition, it is difficult to examine them, and the ability to ask informants for information becomes necessary [36].

Therefore, it is concluded that the SAP or the SAPAS-INF can be used as satisfactory screening instruments for the presence/absence of PD in those cases where patients themselves are not able to provide the required information.

The findings of the present study should be interpreted in light of a number of limitations. First, the study has taken place among psychiatric outpatients in a restricted area, a large city in the southern part of The Netherlands. As a result, there are potential differences between the target population, psychiatric outpatients in The Netherlands, and the accessed study

sample. Another aspect that reduces the generalisability is the fact that persons with a schizoid and/or a schizotypical PD were not present in the study sample. This seems, however, a minor problem, because these two PDs form only a small proportion of the population of individuals with one or more PDs (See also other studies, e.g. [19, 28, 37]). Finally, a possible limitation can be the translation of SAP and the SAPAS-INF into Dutch. Like all cross cultural studies, the questions or items can have a different meaning in the translated instruments resulting from cultural and linguistic differences. This could have an effect on the validity and reliability of the instruments [38]. In our procedure of translation the perspective of psychologist or psychiatrist was present, and the back translation was done in a translation centre. However, further future research has to be done to find out the actual effect of the translation.

The moderate performance of the SAP and the SAPAS-INF and, therefore, the rather modest correspondence between the SAP and the SCID-II results can be explained from different perspectives. According to Clifton et al., the discrepancy is due to the fact that the patient's self-reports can reflect information that is based on their external behaviour as well as their own feelings and cognitions, while informants can only base the information they provide on external behaviours [39]. Ready et al. explained the discrepancy with the term 'self-based heuristic': the degree to which an individual's own personality enters into or contributes to a rating of another personality [40].

The present study examined one informant for each patient, selected by the participant, using the term 'letter of recommendation problem', have pointed to the possibility that close friends, spouses, or relatives who are chosen as informants may tend to describe participants in a positive light [41]. Clifton points out that information from only a single informant limits the reliability of the data [39]. Furthermore, he suggests that unselected peers who interact with the individual on a regular basis are likely to be more representative of a diversity of judgments. The use of more informants who are representative of the complete social network of patients would be a worthwhile future research direction. However, it should be kept in mind that this striving towards a more complete picture of pathological personality is at odds with practical requirements of shortness, fastness, and low costs.

Klonsky concluded that informants have less information, because they often observe the patient in a particular context, while the patient can act differently in varying contexts [40]. He suggests that informants have to know the patients over time and must be close to the patient. Zimmerman, Downson and Dreesen have discussed the ability that patients or informants are able to shift between trait and state, and they disagree on which person can give the most objective information about the patient's personality [8, 42, 43].

Finally, McKeeman and Erikson describe the possibility that informants have ulterior motives other than giving objective information [44]. According to these researchers, informants can overrate symptoms because they want the patient to receive treatment. On the other hand, they can underrate symptoms if they do not want to put the patient in a bad light or if the informants deny that the behaviour may cause trouble.

5 Conclusion

Our findings support the idea that patients themselves can give the best information regarding their own personality status. The SAP can be a satisfactory alternative when reading and writing difficulties are present or when there are problems in contacting the patient. We did not find a significant difference between male and female informants; nor did we find that informants who had known the patient over a longer time were better able to give more correct information.

By definition, the informant interview is not suited for making clinical diagnoses of PD, but it might be used effectively as a screener if the patient is not able to provide information, or the focus is on finding individuals with a borderline PD in the diagnostic phase of treatment.

Competing interests

The authors declare that they have no competing interests.

References

[1] Adel A, Grimm G, Mogge NL, et al. Prevalence of personality disorders at a rural state psychiatric hospital. J Rural Comm Psychol. 2006; 9: 1.

[2] Zimmerman M, Rothschild L, Chelminski, I. The prevalence of DSM-IV personality disorders in psychiatric outpatients. Am J Psychiatry. 2005; 162: 1911-1918. PMid:16199838 http://dx.doi.org/10.1176/appi.ajp.162.10.1911

[3] Alnaes R, Torgersen, S. Personality and personality disorders predict development and relapses of major depression. Acta Psychiatr Scand. 1997; 95: 336-342. PMid:9150829 http://dx.doi.org/10.1111/j.1600-0447.1997.tb09641.x

[4] Farmer RF, Nelson-Gray, RO. Personality disorders and depression: Hypothetical relations, empirical findings, and methodological considerations. Clin Psychol Review. 1990; 10: 453-476. http://dx.doi.org/10.1016/0272-7358(90)90048-F

[5] Shea MT, Widiger TA, Klein MH. Comorbidity of personality disorders and depression. Implications for treatment. J Consult Clin Psychol. 1992; 60: 857-868. PMid:1460149 http://dx.doi.org/10.1037/0022-006X.60.6.857

[6] Moran P, Walsh E, Tyrer P, Burns T, Creed F, Fahy T. The impact of co-morbid personality disorder on violence in psychosis—data from the UK700 trial. Br J Psychiatry. 2003; 182: 129-134. PMid:12562740 http://dx.doi.org/10.1192/bjp.182.2.129

[7] Newton-Howes G, Tyrer P, Johnson T. Personality disorder and the outcome of depression: Meta-analysis of published studies. Br J Psychiatry. 2006; 188: 13-20. PMid:16388064 http://dx.doi.org/10.1192/bjp.188.1.13

[8] Zimmerman M. Diagnosing personality disorders: A review of issues and research methods. Arc Gen Psychiatry. 1994; 51: 225-45. http://dx.doi.org/10.1001/archpsyc.1994.03950030061006

[9] Lenzenweger MF, Loranger AW, Korfine L, Neff C. Detecting personality disorders in a nonclinical population. Application of a 2-stage procedure for case identification. Arch Gen Psychiatry. 1997; 54: 345-51. PMid:9107151 http://dx.doi.org/10.1001/archpsyc.1997.01830160073010

[10] Van Horn E, Manley C, Leddy D, Cicchetti D, Tyrer P. Problems in developing an instrument for the rapid assessment of personality status. Eur Psychiatry. 2000; 15: 29-33. http://dx.doi.org/10.1016/S0924-9338(00)90497-8

[11] Langbehn DR, Pfohl BM, Reynolds S, Clark LA, Battaglia M, Bellodi L, et al. The Iowa Personality Disorder Screen: Development and preliminary validation of a brief screening interview. J Pers Disord. 1999; 13: 75-89. PMid:10228929 http://dx.doi.org/10.1521/pedi.1999.13.1.75

[12] Moran P, Leese M, Lee T, Walter P, Thornicroft G, Mann A. Standardised assessment of personality—abbreviated scale (SAPAS): Preliminary validation of a brief screen for personality disorder. Br J Psychiatry. 2003; 183: 228-232. PMid:12948996 http://dx.doi.org/10.1192/bjp.183.3.228

[13] Olssøn I, Sørebø Ø, Dahl AA. A cross-sectional testing of The Iowa Personality Disorder Screen in a psychiatric outpatient setting. BMC Psychiatry. 2011; 11: 105. PMid:21711506 http://dx.doi.org/10.1186/1471-244X-11-105

[14] Germans S, Van Heck GL, Hodiamont PPG. Results of the search for personality disorder screening tools: Clinical implications J Clin Psychiatry. 2012; 73: 165-173. PMid:22401476 http://dx.doi.org/10.4088/JCP.11m07067

[15] Mann AH, Jenkins R, Cutting JC, Cowen PJ (1981). The development and use of a standardized assessment of abnormal personality. Psychol Med. 1981; 11: 839-847. PMid:7323239 http://dx.doi.org/10.1017/S0033291700041337

[16] Pilgrim JA, Mann AH. Use of the Standardized Assessment of Personality to determine the prevalence of personality disorder in psychiatric in-patients. Psychol Med. 1990; 20: 985-992. http://dx.doi.org/10.1017/S0033291700036692

[17] Walters P, Moran P, Choudhury P, Tennyson L, Mann A. (2004). Screening for personality disorder: A comparison of personality disorder assessment by patients and informants. Intern J Methods Psychiatric Research. 2004; 13: 34-9. PMid:15181485 http://dx.doi.org/10.1002/mpr.162

[18] Pilgrim JA, Mellers JD, Boothby H, Mann AH. Inter-rater and temporal reliability of the Standardized Assessment of Personality and the influence of informant characteristics. Psychol Med. 1993; 23: 779-786. PMid:8234584 http://dx.doi.org/10.1017/S0033291700025551

[19] Germans S, Van Heck GL, Moran P, Hodiamont PPG. The self-report Standardized Assessment of Personality—Abbreviated Scale. Personal Ment Health. 2008; 2: 70-76. http://dx.doi.org/10.1002/pmh.34

[20] First, M.B., Spitzer, R.L., Gibbon, M., & Williams, J.B.W. The structured clinical interview for DSM-III-R personality disorders (SCID-II): Part I: Description. J Personality Disord. 1995; 9: 92-104. http://dx.doi.org/10.1521/pedi.1995.9.2.92

[21] Weertman A, Arntz A, Kerkhofs MLM. Gestructureerd Klinisch Interview voor de DSM-III Persoonlijkheidsstoornissen [Structured Clinical Interview for the DSM-III personality disorders] (pp. 5-15). Lisse, The Netherlands, Swets Test Publisher 1997.

[22] American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders (fourth edition) (DSM-IV). Washington, DC: APA 1994.

[23] Maffei C, Fossati A, Agostoni I, Barraco A, Bagnato M, Deborah D, et al. Interrater reliability and internal consistency of the structured clinical interview for DSM IV Axis II personality disorder (SCID II) version 2.0. J Pers Disord. 1997; 11: 85-92. http://dx.doi.org/10.1521/pedi.1997.11.3.279

[24] Westen D, Shelder J. Revising and assessing Axis II, Part I: Development of a clinically and empirically valid assessment method. Am J Psychiatry. 1999; 156: 258-72.

[25] Westen D, Shelder J. Revising and assessing Axis II, Part II: Toward an empirically based and clinically useful classification of personality disorders. Am J Psychiatry. 1999; 156: 273-85.

[26] Weertman A, Arntz A, Dreessen L, Van Velzen C, Vertommen S. Short-interval test-retest interrater reliability of the Dutch version of the Structured Clinical Interview for DSM-IV personality disorders (SCID-II). J Pers Disord. 2003; 17: 562-7. PMid:14744081 http://dx.doi.org/10.1521/pedi.17.6.562.25359

[27] Arntz A, Van Beijsterveld B, Hoekstra B, Hofman A, Eussen M, Sallaerts S. The interrater reliability of a Dutch version of the Structured Clinical Interview for DSM-III Personality Disorders. Acta Psychiatr Scand. 1992; 85: 394-400. PMid:1605061 http://dx.doi.org/10.1111/j.1600-0447.1992.tb10326.x

[28] Masthoff EDM, Trompenaars AJWM: Quality of life in psychiatric outpatients. Doctoral Dissertation. Tilburg, the Netherlands: Tilburg University 2006.

[29] McKeon J, Roa B, Mann A. Life events and personality traits in obsessive compulsive neurosis. Br J Psychiatry. 1984; 144: 185-189. PMid:6704605 http://dx.doi.org/10.1192/bjp.144.2.185

[30] Loranger AW, Sartorius N, Andreoli A, Berger P, Buchheim P, Channabasavanna SM, et al. The international Personality Disorder Examination. Arch Gen Psychiatry. 1994; 51: 215-224. PMid:8122958 http://dx.doi.org/10.1001/archpsyc.1994.03950030051005

[31] Mann AH, Raven P, Pilgrim J, Khanna S, Velayudham A, Suresh KP, et al. An assessment of the Standardised Assessment of Personality as a screening instrument for the international personality examination: A comparison of informant and patient assessment for personality. Psychol Med. 1999; 29: 985-89. PMid:10473326 http://dx.doi.org/10.1017/S0033291798007545

[32] Cohen J. A coefficient of agreement for nominal scales. Educ Psychol Meas. 1960; 1: 37-46. http://dx.doi.org/10.1177/001316446002000104

[33] Landi JR, Koch GG. The measurement of observer agreement for categoral data. Biometrics. 1977; 33: 159-174. http://dx.doi.org/10.2307/2529310

[34] Maxwell S. Sample size and multiple regression analysis. Psychological Methods. 2000; 5: 434-458. PMid:11194207 http://dx.doi.org/10.1037/1082-989X.5.4.434

[35] Gabbard, G. O. Practice guideline for the treatment of patients with borderline personality disorder. American Psychiatric Association. Am J Psychiatry. 2001; 158(10 Suppl): 1-52. PMid:11136624 http://dx.doi.org/10.1176/appi.ajp.158.1.1

[36] Barnow S, Arens EA, Sieswerda S, et al. Borderline personality disorder and psychosis: A review. Curr Psychiatry Rep. 2010; 12(3): 186-95. PMid:20425279 http://dx.doi.org/10.1007/s11920-010-0107-9

[37] Bernstein DP, Useda D, Siever LJ. Paranoid personality disorder. In W.J. Livesly (Ed.), The DSM-IV personality disorders. London: The Guilford Press. 1995.

[38] Sumathipala A, Murray J. New approach to translating instruments for cross-cultural research: A combined qualitative and quantitative approach for translation and consensus generation. Int J Method Psych. 2000; 9: 87-95. http://dx.doi.org/10.1002/mpr.83

[39] Clifton A, Turkheimer E, Oltmanns TF. Personality disorder in social networks: Network position as a marker of interpersonal dysfunction. Soc Networks. 2009; 31: 26-32. PMid:20046981 http://dx.doi.org/10.1016/j.socnet.2008.08.003

[40] Ready RE, Clark LA, Watson D, Westerhouse K. Self-and peer-reported personality: Agreement, trait ratability and the 'self-based heuristic'. J Res Pers. 2000; 34: 208-224. http://dx.doi.org/10.1006/jrpe.1999.2280

[41] Klonsky ED, Oltmanns TF, Turkheimer E. Informant report of personality disorder: Relation to self-report and future research directions. Clin Psychol: Science and Practice. 2002; 9: 300-11. http://dx.doi.org/10.1093/clipsy.9.3.300

[42] Dowson JH. Assessment of DSM-III-R personality disorders by self-report questionnaire: The role of informants and a screening Test for Co-morbid Personality Disorders (STCPD). Br J Psychiatry. 1992; 161: 344-352. PMid:1393303 http://dx.doi.org/10.1192/bjp.161.3.344

[43] Dreessen L, Hildebrand M, Arntz A. Patient-informant concordance on the Structured Clinical Interview for DSM-III-R personality disorders (SCID-II). J Pers Disord. 1998; 12: 149-161. PMid:9661101 http://dx.doi.org/10.1521/pedi.1998.12.2.149

[44] Mckeeman JL, Erickson MT. Self and informants rating of the SCID-II personality disorder items for non-referred college women: Effects on item and participants characteristics. J Clin Psychol. 1997; 53: 523-33. http://dx.doi.org/10.1002/(SICI)1097-4679(199710)53:6<523::AID-JCLP1>3.0.CO;2-L

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