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The personality profile of borderline personality disordered patients using the five-factor model of personality

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ABSTRACT. The purpose of this *ex post facto* study is to analyze the personality profile of outpatients who met criteria for borderline personality disorder according to the Five-Factor Model of personality. All patients (N = 52) completed the International Personality Disorder Examination (IPDE) Screening Questionnaire, the Big Five Questionnaire (BFQ), the Beck Depression Inventory (BDI), and the Beck Hopelessness Scale (BHS). The results show a high comorbidity with other DSM-IV-TR Axis II disorders, in particular with those from Cluster C. The BFQ average score indicates that the outpatients who met borderline criteria score lower than controls on all five dimensions, and especially on emotional stability. Correlations were computed between the BFQ and the IPDE scales in our sample. These results suggest that specific personality profile are linked to different comorbidity patterns. More than a half of our sample has clinically significant scores on Beck's scales. Surprisingly, depression and hopelessness are neither correlated with the borderline scale, nor have an effect in the relationship between personality and personality disorders.

KEYWORDS. Personality disorders. Borderline Personality Disorder. Personality. *Ex post facto* study.

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RESUMEN. El objetivo de este estudio *ex post facto* es el análisis del perfil de personalidad de pacientes ambulatorios con trastorno límite de la personalidad según el modelo de personalidad de los Cinco Factores. Los pacientes (N = 52) completaron el Examen Internacional de los Trastornos de Personalidad (IPDE), el Cuestionario de los Cinco Grandes (BFQ), el Inventario de Depresion de Beck (BDI) y la Escala de Desesperanza de Beck (BHS). Los resultaron muestran una alta comorbilidad con otros trastornos del Eje II del DSM-IV-TR, en particular con aquellos del clúster C. La puntuación media del BFQ indica que los pacientes ambulatorios con trastorno límite de la personalidad puntúan más bajo que los controles en las cinco dimensiones, especialmente en la estabilidad emocional. Correlacionaron las escalas del BFQ con las escalas IPDE. Estos resultados sugieren que perfiles específicos de personalidad están vinculados a diferentes patrones de comorbilidad. Más de la mitad de la muestra tiene puntuaciones clínicamente significativas en el BDI. Sorprendentemente, depresión y desesperanza no están correlacionados con la escala del trastorno límite de personalidad, ni tienen un efecto en la relacion entre personalidad y trastornos de la personalidad.

PALABRAS CLAVE. Trastornos de personalidad. Trastorno límite de la personalidad. Personalidad. Estudio *ex post facto*.

Several studies have focused on the relation between personality disorders (PDs) and the Five-Factor Model of personality (FFM). Some authors have suggested that PDs are maladaptive variants of normal personality traits (Widiger and Costa, 2002). It should therefore be possible to understand PDs using the dimensional approach of the FFM (Miller, Lynam, Widiger, and Leukefeld, 2001; Trull, Widiger, Lynam, and Costa, 2003; Widiger, 1997). The FFM describes five broad domains that map normal personality traits namely: *Neuroticism* (N), *Extraversion* (E), *Openness to experience* (O*), Agreeableness* (A), *and Conscientiousness* (C). The NEO-PI-R (Costa and McCrae, 1992) was specifically designed to assess the five dimensions of the FFM, and Costa and McCrae (1990) have suggested that the extremeness of scores on the dimensions of the FFM could differentiate normal personality from pathological personality.

The Axis II of the Diagnostic and Statistical Manual of Mental Disorders: Text Revision, 4th edition (DSM-IV-TR; American Psychiatric Association, 2000) defines ten PDs, grouped into three clusters. Cluster A, characterized by "odd and eccentric" behaviors contains the paranoid, schizoid and schizotypal PDs, Cluster B, characterized by "dramatic and erratic" behaviors, contains the histrionic, antisocial, narcissistic and borderline PDs, and Cluster C, characterized by "anxious and fearful" behaviors, contains the compulsive, dependent and avoidant PDs. Borderline personality disorder is characterized by emotional dysregulation, impulsivity and, interpersonal as well as self-image instability.

Lynam and Widiger (2001) have defined prototypes for each PD according to the FFM using an expert consensus approach. Widiger Trull, Clarkin, Sanderson, and Costa (2002) further associated each PD with a specific personality profile according to the FFM. In particular, borderline PD should be characterized by high scores on *Neuroticism*

except for *Self-consciousness*, by low scores on two facets of the *Agreeableness* domain, *i.e.*, *Trust and Compliance*, and by low scores on the *Competence* facet of the *Conscientiousness* domain.

Several studies have examined the relationship between the FFM and the PDs. Using the NEO-PI-R in a non-clinical sample, Dyce and O'Connor (1998) observed especially high correlations between the borderline PD, and Neuroticism, and all the facets associated to this domain. Similar results were found by Trull, Widiger, and Burr (2001) and by Aluja, Cuevas, García, and García (2007). Likewise, clinical studies have suggested that the borderline PD symptoms could be successfully predicted by the facets and domains of the FFM, the best predictors are usually high Neuroticism, low Agreeableness, and low Extraversion (Bagby, Costa, Widiger, Ryder, and Marshall, 2005; Clarkin Hull, Cantor, and Sanderson, 1993; Huprich, 2003; Miller, Reynolds and Pilkonis., 2004; Morey *et al.,* 2002; Reynolds and Clark, 2001; Soldz, Budman, Demby, and Merry, 1993; Trull, 1992; Wilberg, Urnes, Friss, Pedersen, and Karterud 1999; Zweig-Frank and Paris, 1995). Thus, empirical results generally seem to be in reasonably good agreement with the theoretical predictions proposed by Widiger and colleagues (2002).

Borderline PD is frequently associated with other Axis II disorders. In a study based on DSM-III-R criteria, Zanarini and colleagues (1998) and Zanarini, Frankenburg, Vujanovic *et al.* (2004) showed that approximately 30% of patients who met the criteria for borderline PD also met the criteria for one or more PD in the odd behavior cluster, 75% of patients meeting criteria for borderline PD met the criteria for one or more PD in the anxious behavior cluster, and 40% of patients meeting criteria for borderline PD met the criteria for at least one other disorder in the dramatic behavior cluster. Similar results were found by McQuillan and colleagues (2005), based on DSM-IV criteria. The comorbidity rates of Axis I mood and anxiety disorders are also frequent (Marañón, Echeburúa, and Grijalvo, 2007; Zanarini, Frankeburg, Hennen, Reich, and Silk, 2004). Using the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, and Erbaugh, 1961), and the Beck Hopelessness Scale (BHS; Beck, Waissman, Lester, and Trexler, 1974) McQuillan and colleagues (2005) found a high frequency of elevated scores for both depression and hopelessness in a sample of outpatients who met criteria for borderline PD.

Other instruments measuring dimensions similar to the FFM have been published. Caprara, Barbaranelli and Borgogni (2001) developed the Big Five Questionnaire (BFQ), which assesses five dimensions that are highly correlated with the scales of the NEO-PI-R: Energy correlates with Extraversion (r = .67), Friendliness correlates with Agreeableness (r = .58), both Conscientiousness scales correlate (r = .73), Emotional Stability correlates negatively with Neuroticism (r = -.78), and Openness correlates with Openness to Experience (r = .68). According to the authors of the BFQ, borderline PD should correlate negatively with Emotional Stability, Friendliness and Conscientiousness.

The aim of the present study is to refine the analysis of the personality profile of outpatients who met criteria for borderline PD according to the FFM using the BFQ. As stated earlier, patients meeting criteria for borderline PD are expected to score lower on Emotional Stability, Friendliness and Conscientiousness than a normative sample. Moreover, this research studies the comorbidity between borderline PD and other Axis II disorders using the International Personality Disorder Examination (IPDE) Screening Questionnaire. Correlation between each IPDE scale and the BFQ is also investigated. These correlations should allow us to associate different personality profiles to the various comorbidity patterns displayed by members of the group of outpatients who met criteria for borderline PD. Finally, the effects of depression and hopelessness are also taken into account as candidate moderating factors.

The report from the *ex post facto study* (Montero and Leon, 2007) was written following the norms established by Ramos-Alvarez, Valdés-Conroy, and Catena (2006).

Method

Participants

The sample consisted of 52 outpatients (45 females and 7 males) referred to CARE, a specialized treatment program for borderline personality disorders in the department of psychiatry at the University Hospitals of Geneva, in Switzerland. The mean age was 33.09 for women (*SD* = 7.79) and 27.71 for men (*SD* = 14.9).

Measures

- The French-version of the screening questionnaire of the International Personality Disorder Examination (IPDE; Loranger *et al.,* 1994) is made up 77 true-false items and assesses PDs according to DSM-IV criteria. The validity of the IPDE has been confirmed conducting a field trial in 11 countries and both interrater agreement and temporal stability were adequate and similar to other instruments used to diagnose mental disorders (Loranger *et al.,* 1994). The IPDE screening questionnaire produces an important number of false-positives but relatively few false-negatives. A score of 3 or above on any personality disorder scale suggests the presence of PD. In this study, a cutoff of 4 is used to reduce false-positives (McQuillan *et al.,* 2005).
- The Big Five Questionnaire (BFQ; Caprara *et al.*, 2001) is specifically designed to assess the five dimensions of the FFM. Each dimension is divided into two subscales. This instrument is made up of 132 items in a 5-point response format. The first domain *Energy* (E) is divided into *Dynamism* (Dy) and *Dominance* (Do). The second domain *Friendliness* (F) is divided into *Cooperativeness* (Co) and *Politeness* (Po). The third domain *Conscientiousness* (C) is divided into *Scrupulousness* (Sc) and *Perseverance* (Pe). *Emotional stability* (S) is the forth domain and is divided into *Emotion Control* (EC) and *Impulse Control* (IC). The

fifth dimension *Openness* (O) is divided into *Openness to Culture* (OC) and *Openness to Experiences* (OE). This questionnaire also contains a social desirability scale, *Lie* (L). The five-factor structure of the BFQ is confirmed and the psychometric properties of the French-version are good and similar to the original version of this instrument (Barbaranelli and Caprara, 2002; Caprara *et al.,* 2001). For the French-version, the reliability coefficients calculated with Cronbach's alpha range from .70 to .89 for the dimensions and from .59 to .84 for the facets.

– Beck Depression Inventory (BDI; Beck *et al.,* 1961) made up of 21 items, assesses the symptoms of the depression. Each item is scored on a 4-point scale (0–3). The total score ranges from 0 to 63, where scores of 17 or more indicate the presence of clinically significant depressive symptoms (Beck and Steer, 1987). The psychometric properties of the French-version of the BDI are adequate. The three-factor structure of the French-version of the BDI is similar to the original English-version. This questionnaire has a good internal consistency and also a good temporal stability (Bourque and Beaudette, 1982).
– Beck Hopelessness Scale (BHS; Beck *et al.,* 1974) is made up of 20 items in a dichotomous format *(true/false)* and measures negative expectations. The score ranges from 0 to 20. Previous studies have shown that a score of 9 or above on the BHS is predictive of future suicide attempts (Beck, Brown, Berchick, Stewart, and Steer, 1990). Bouvard, Charles, Guérin, Aimard, and Cottraux (1985) studied the psychometric properties of the French-version of the BHS. The Cronbach's alphas range from .79 to .97 and the temporal stability is adequate.

Procedure

All patients completed individually the IPDE screening questionnaire, the BFQ, the BDI, and the BHS at the beginning of the treatment. The patients were fully informed and they gave a written consent. Helsinki principles were followed. The Declaration of Helsinki was developed by the World Medical Association as a statement of ethical principles for medical research involving human subjects.

Results

Descriptive statistics

Table 1 gives the distribution of the individual scores for each of the ten scales of the IPDE screening questionnaire. Subjects with a score of 4 or above on a particular scale are considered to meet the diagnostic criteria of the corresponding disorder. A high comorbidity is observed in this sample. The incidence of the Cluster C disorders is particularly high.

TABLE 1. Descriptive data for the IPDE criteria.

	Min	*Max*	*Mean*	*SD*	*Scores ≥ 4*
Paranoid	0	7	3.94	1.67	55.80%
Schizoid	0	7	2.83	1.64	34.60%
Schizotypal	1	9	4.31	2.18	63.50%
Antisocial	1	5	3.29	1.19	40.40%
Borderline	4	9	6.94	1.51	100%
Histrionic	1	8	3.63	1.63	50%
Narcissistic	0	7	3.31	1.94	51.90%
Avoidant	2	8	5.70	1.81	86.50%
Dependent	0	8	4.75	1.97	78.80%
Compulsive	0	8	4.15	1.62	67.30%
Number of PDs	1	10	6.29	2.14	

Effect of group membership

As described in Table 2, we also conduct *t*-tests in order to compare the BFQ scores obtained by the sample who met borderline criteria and by a non-clinical normative French sample, made up of 314 subjects (Caprara *et al.,* 2001, p. 38). The results show that the average score for the sample who met borderline criteria is significantly lower on all five dimensions, and especially so for *Emotional stability.* Likewise, at the facet level, the sample of outpatients scores lower on all subscales, except on the *Scrupulousness* facet and on the *social desirability* scale, for which the scores are not significantly different. Moreover, the effect size calculated with Cohen's *d* is medium for the *Conscientiousness* dimension and large for the four others dimensions.

TABLE 2. T-Test for the sample meeting borderline criteria and for the non-clinical sample.

	Borderline (*n* = 52)		*Non-Clinical* (*n* = 314)				
	Mean	*SD*	*Mean*	*SD*	*t*	*p*	*d*
E	66.88	12.04	79.45	11.65	7.17	<.001	1.07
F	72.58	13.07	80.53	9.47	5.28	<.001	.79
C	73.27	12.98	80.15	11.04	4.05	<.001	.61
S	51.08	8.12	69.55	14.72	8.83	<.001	1.34
O	78	6.67	88.56	11.34	6.53	<.001	.99
Dy	34.77	8.12	41.77	6.66	6.79	<.001	1.02
Do	32.12	6.67	37.68	6.54	5.67	<.001	.85

TABLE 2. T-Test for the sample meeting borderline criteria and for the non-clinical sample (*cont.*).

	Borderline (*n* = 52)		*Non-Clinical* (*n* = 314)				
	Mean	*SD*	*Mean*	*SD*	*t*	*p*	*d*
Co	39.23	6.61	42.49	4.94	4.18	<.001	.63
Po	33.35	7.65	38.04	5.94	5.05	<.001	.76
Sc	36.15	7.89	36.40	7.53	.22	ns	.03
Pe	37.12	7.10	43.75	5.99	7.19	<.001	1.08
EC	23.38	7.52	35.44	8.18	9.95	<.001	1.49
IC	27.69	8.80	34.11	7.96	5.30	<.001	.79
OC	38.71	8.12	43.33	6.69	4.46	<.001	.67
OE	39.29	6.25	45.23	5.94	6.63	<.001	.99
L	28.44	6.02	29.67	7.21	1.16	ns	.17

Note. E = *Energy*, F = *Friendliness*, C = *Conscientiousness,* S = *Emotional stability,* O = *Openness*, Dy = *Dynamism*, Do = *Dominance*, Co = *Cooperativeness,* Po = *Politeness,* Sc = *Scrupulousness*, Pe = *Perseverance*, EC = *Emotion Control*, IC = *Impulse Control,* OC = *Openness to Culture*, OE = *Openness to Experiences*, L = *Lie*.

At the facet level, the effect size is small for the *Scrupulousness* and the *social desirability* scale, medium for the *Friendliness* subscales, *i.e. Cooperativeness* and *Politeness*, as well as for *Impulse Control* and *Openness to Culture*. Furthermore, the effect size is large for both *Energy* subscales, *i.e. Dynamism* and *Dominance*, for *Perseverance*, *Emotion Control*, and *Openness to Experiences*.

Correlations within the patient group

The IPDE scales are not independent, the correlations range from -.04 to .74 (*Mdn* = .39). Table 3 gives the correlations between the numbers of endorsed criteria for each PD and the BFQ scores, in the sample meeting borderline criteria. The correlations range between .00 and -.55 (*Mdn* = -.12). *Energy* negatively correlates with the *Schizoid*, the *Schizotypal,* and the *Avoidant* scales. *Friendliness* negatively correlates with the *Schizotypal* scale, and *Emotional stability* negatively correlates with the *Borderline* scale. This suggests that some specific personality profiles are related with comorbidity. The number of PDs correlates significantly with *Energy*, and its subscale *Dynamism*, with *Friendliness,* and its subscales *Cooperativeness*, and *Politeness*, with the subscale *Perseverance*, and with *Openness* and its subscale *Openness to Culture.*

TABLE 3. Correlations between the IPDE and the BFQ.

	BFQ dimensions					*BFQ facets*									
IPDE scales	*E*	*F*	*C*	*S*	*O*	*Dy*	*Do*	*Co*	*Po*	*Sc*	*Pe*	*EC*	*IC*	*OC*	*OE*
Paranoid	-.10	-.34*	.16	-.12	-.17	-.12	-.03	-.31*	-.32*	.23	.05	-.12	-.10	-.26	-.01
Schizoid	-.53**	-.33**	-.22	-.00	-.39**	-.55**	-.28*	-.24	-.36**	-.12	-.27	-.14	.11	-.29*	-.40**
Schizotypal	-.46**	-.40**	-.18	-.15	-.35*	-.53**	-.19	-.35**	-.38**	.00	-.33*	-.18	-.09	-.35**	-.24
Antisocial	-.02	-.22	-.06	-.36**	-.06	-.02	-.07	-.15	-.24	.02	-.13	-.18	-.42**	-.13	.06
Borderline	-.07	-.17	-.15	-.47**	-.15	.00	-.13	-.11	-.20	-.07	-.21	-.49**	-.34*	-.19	-.06
Histrionic	.17	.16	-.12	-.22	-.17	.07	.22	.02	.26	-.03	-.19	-.17	-.20	-.26	-.00
Narcissistic	.17	-.14	.05	-.01	-.06	.01	.29*	-.15	-.12	.15	-.07	.12	-.11	-.11	.02
Avoidant	-.49**	-.31*	-.10	-.26	-.21	-.51**	-.27	-.21	-.35*	.06	-.26	-.32*	-.15	-.20	-.16
Dependent	-.17	.08	-.34*	-.24	-.32*	-.12	-.16	-.01	.14	-.25	-.34*	-.31*	-.12	-.36**	-.18
Compulsive	-.01	-.21	.14	-.22	-.19	-.06	.05	-.20	-.17	.20	.04	-.22	-.17	-.23	-.08
Number of PDs	-.28*	-.36**	-.10	-.26	-.35*	-.35*	-.09	-.37**	-.29*	.09	-.30*	-.26	-.19	-.38**	-.20

Note. E = *Energy,* F = *Friendliness,* C = *Conscientiousness,* S = *Emotional stability,* O = *Openness,* Dy = *Dynamism,* Do = *Dominance,* Co = *Cooperativeness,* Po = *Politeness*, Sc = *Scrupulousness,* Pe = *Perseverance,* EC = *Emotion Control,* IC = *Impulse Control*, OC = *Openness to Culture*, OE = *Openness to Experiences*.

** Correlation is significant at the .01 level (2-tailed);

* Correlation is significant at the .05 level (2-tailed).

The 76.50% of our sample has a score of 17 or above on the BDI (M = 26.59; SD = 14.06) and 60.80% has a score of 9 or above on the BHS (M = 10.14; SD = 4.93). Both scales are highly correlated (r = .69). Moreover, we calculate the correlations between both BDI and BHS, and the BFQ. The BDI negatively correlates with *Energy* (r = -.30), and *Openness* (r = -.28). The BHS negatively correlates with *Energy* (r = -.50), *Friendliness* (r = -.36), *Conscientiousness* (r = -.32), *Emotional Stability* (r = -.35), and *Openness* (r = -.56). We calculate the correlations between both BDI and BHS, and the number of endorsed items for each PD scale. The BDI correlates with the *Schizoid* (r = .29) and the *Schizotypal* (r = .43) scales, and the BHS correlates with the *Schizoid* (r = .45), the *Schizotypal* (r = .42) and the *Avoidant* (r = .38) scales. The correlations between both BDI and BHS, and the number of PDs were also calculated, but are not significant.

Partial correlations between the BFQ and the IPDE scales were conducted controlling for depression and hopelessness. The correlations do not vary significantly. Depression and hopelessness do not seem to mediate significantly the relation between personality and PDs.

Regression analyses

Regression analyses with the stepwise method were conducted to try to predict IPDE scores from the BFQ (see Table 4). The results indicate that *Energy* negatively predicts *Schizoid, Schizotypal*, and *Avoidant scales. Friendliness* negatively predicts *Paranoid* scale, *Emotional stability* negatively predicts *Antisocial*, and *Borderline* scales, and *Conscientiousness* negatively predicts *Dependent* scale. At the facet-level, *Dynamism* negatively predicts *Schizoid, Schizotypal* and *Avoidant* scales, *Politeness* negatively predicts *Paranoid* PD, *Emotion Control* negatively predicts *Borderline*, and *Dependent* scales.

TABLE 4. Regressions with the stepwise method predicting the IPDE scores by the BFQ.

IPDE scales predicted by the BFQ dimensions	*ß*	*p*	*IPDE scales predicted by the BFQ facets*	*ß*	*p*
Paranoid			Paranoid		
Friendliness	-.34	.012	Politeness	-.32	.022
R^2	.12	.012	R^2	.10	.022
Schizoid			Schizoid		
Energy	-.53	.001	Dynamism	-.55	.001
R^2	.28	.001	R^2	.30	.001
Schizotypal			Schizotypal		
Energy	-.46	.001	Dynamism	-.53	.001
R^2	.21	.001	R^2	.27	.001
Antisocial			Antisocial		
Emotional stability	-.36	.010	Impulse Control	-.42	.002
R^2	.13	.010	R^2	.18	.002

TABLE 4. Regressions with the stepwise method predicting the IPDE scores by the BFQ *(cont.)*.

Antisocial		
Emotional stability	-.36	.010
R^2	.13	.010
Borderline		
Emotional stability	-.47	.001
R^2	.22	.001
Avoidant		
Energy	-.49	.001
R^2	.25	.001
Dependent		
Conscientiousness	-.34	.014
R^2	.11	.014
Number of PDs		
Friendliness	-.29	.036
Openness	-.27	.045
R^2	.20	.005

Antisocial		
Impulse Control	-.42	.002
R^2	.18	.002
Borderline		
Emotion control	-.49	.001
R^2	.24	.001
Narcissistic		
Dominance	.29	.035
R^2	.09	.035
Avoidant		
Dynamism	-.51	.001
R^2	.26	.001
Dependent		
Openness to Culture	-.42	.001
Emotion Control	-.40	.002
Politeness	.32	.014
R^2	.32	.001
Number of PDs		
Openness to Culture	-.38	.004
Emotion Control	-.26	.043
R^2	.21	.003

The number of PDs is negatively predicted by the *Friendliness* and the *Openness* dimensions, and by the *Openness to Culture*, and by the *Emotion Control* facets. Regression analyses with stepwise method are also conducted to predict IPDE scales from both BDI and BHS. The results indicate that the BHS positively predicts *Schizoid* (ß = .45; R^2 = .20; $p < .001$), *Schizotypal* (ß= .44; R^2 = .20; $p <.001$), and *Avoidant* (ß = .38; R^2 = .14; $p < .007$) scales. The BDI is not a significant predictor of any IPDE scale.

Discussion

Our sample was made up of outpatients who met borderline criteria. However we have seen that comorbidity is extremely high. Indeed, according to the IPDE screening questionnaire each subject meets criteria for about 6 PDs. Our results are consistent with previous studies (McQuillan *et al.,* 2005; Zanarini *et al.,* 1998), and confirmed that borderline PD is frequently associated with other Axis II. In substance, about 51% of our sample met the criteria for one or more PDs in Cluster A, about 47% met the criteria for one or more PDs in Cluster B and about 77% met the criteria for one or more PDs in Cluster C. These results are an illustration of how categorical classifications of PDs often do not allow for a well-differentiated diagnosis.

Regarding the BFQ, our results indicated that outpatients meeting borderline criteria score lower on all dimensions and facets, except for *Scrupulousness* and the *social*

desirability scale. The largest difference between both groups is on *Emotional Stability*. This confirms the results concerning *Neuroticism* reported by previous clinical studies that used others instruments assessing the FFM as the NEO-PI-R (Bagby *et al.,* 2005; Clarkin *et al*., 1993; Huprich, 2003; Miller *et al.,* 2004; Morey *et al.,* 2002; Soldz *et al.,* 1993; Trull, 1992; Wilberg *et al.,* 1999; Zweig-Frank and Paris, 1995) and suggest that patients meeting criteria for PDs have personality profiles with extreme scores on some specific personality traits, as suggested by Lynam and Widiger (2001).

In our sample the only Big Five dimension that correlates significantly with the IPDE borderline scale is *Emotional Stability.* This result is similar to those of previous studies. However it does not agree with the hypotheses suggested by Caprara and colleagues (2001). These authors predicted that borderline features should further correlate negatively with *Friendliness,* and *Conscientiousness*. Moreover the regression analyses we conducted indicated that borderline symptoms were linked only with *Emotional Stability*. Indeed, *Emotional Stability* explained 22% of the variance in the borderline PD scale, and at the facet level, *Emotion Control* predicted 24% of the variance. The *Emotional Stability* scale thus seems to be a promising candidate for predicting borderline PD.

Concerning the BHS and BDI scores, 76.50% of our sample met the criteria for Depressive Symptoms, and 60.80 % the criteria for *Hopelessness*, a scale that is reportedly predictive of future suicide attempts. However, the BHS and BDI did not correlate with the B*orderline* PD scale. This result is unexpected. Indeed, affective instability, the tendency to experience negative affect, as well as suicidal behaviors are considered to be clinically significant criteria for borderline PD. These both scales do not seem to be related to the number of borderline symptoms, but seem to be associated with the comorbid personality disorders. Indeed, depression and hopelessness are linked to the *Schizoid* and *Schizotypal* scales, and hopelessness is also associated with the *Avoidant* scale.

Our results also indicated that specific personality profiles are associated with the PDs scales. Indeed, the correlations between the PDs symptoms and the personality dimensions indicated that particular traits configurations are related to the PDs scales. According to the hypothesis that PD could be differentiated using the FFM, our results suggested that outpatients meeting borderline criteria scored lower on all dimensions. Although, comorbidity is related to specific personality profiles. Particularly, low scores on *Energy* might be associated with comorbidity with *Schizoid, Schizotypal*, or *Avoidant* PDs, and low scores on *Friendliness* might be associated with comorbidity with *Schizotypal* PD. However, the profiles obtained using the BFQ seem slightly different to those obtained with other measures of the FFM.

We have seen that the patients meeting borderline criteria, on the average, met the criteria for about 6 different PDs. Part of this comorbidity is certainly due to the DSM-IV-TR categorical approach to PDs. However, one must keep in mind that the IPDE screening questionnaire is not intended to make diagnoses but only to screen for possible disorders.

The specific personality profile of outpatients meeting borderline criteria that we observed might be argued in different ways. One reason could be the high comorbidity

found in this sample. In particular, the high incidence of cluster C disorders has irrefutably an impact on the personality profile that we tried to make out. The results of this study show that subjects meeting criteria for borderline PD could be characterized by a specific personality profile as recent researches also pointed out. However, the heterogeneity of the borderline diagnosis should be taken into account. Indeed, the diversity of the borderline symptoms might have an important impact on the personality profile found. Likewise, the mean age of our sample is 33 and clinical research has shown that borderline symptoms tend to decrease with age. Further studies should control at least both variables and their impact on the personality profile.

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