

Uncovering Personality Structure with the Inventory of Personality Organization: Validation
Study with a Portuguese Sample

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Révéler da Structure de la Personnalité avec l'Inventaire de l'Organisation de la Personnalité:
Étude de Validation avec un Échantillon Portugais

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Abstract

Introduction: The Inventory of Personality Organization (IPO) is a self-report measure intended to assess the severity of personality disturbance according to Otto F. Kernberg's model.

Objective: To study factor structure and psychometric properties of the Portuguese version of IPO (IPO-Pt).

Method: Two independent samples of 586 individuals each were used for exploratory and confirmatory factor analyses. Different models were compared in terms of reliability and validity.

Results: A three-factor solution resulted, comprising dimensions labeled as Instability of Self, Instability of Others, and Psychosis. Internal consistency and temporal stability yielded acceptable to excellent results. Correlations with measures of self-concept coherence, emotion dysregulation, psychoticism, symptom severity, and personality disturbance were as expected, and sensitivity to clinical status was confirmed.

Conclusion: IPO-Pt shows encouraging psychometric qualities and its latent structure resonates with important aspects of Kernberg's model, previous findings, and the DSM-5 level of personality functioning scale.

Keywords: personality scales and inventories, personality disorders, personality organization, level of personality functioning, validation studies

Résumé

Introduction: L'Inventaire de l'Organisation de la Personnalité (IOP) est une mesure d'auto-évaluation destinée à évaluer la gravité des troubles de la personnalité selon le modèle d'Otto F. Kernberg.

Objectif : Étudier la structure factorielle et les propriétés psychométriques de la version portugaise de l'IOP (IOP-Pt).

Méthode: Deux échantillons indépendants de 586 personnes chacun ont été utilisés pour des analyses factorielles exploratoires et confirmatoires. Différents modèles ont été comparés en termes de fidélité et validité.

Résultats: Une solution à trois facteurs a été obtenue, comprenant des dimensions dénommées Instabilité du Soi, Instabilité des Autres et Psychose. La consistance interne et la stabilité temporelle étaient acceptables à excellentes. Les corrélations avec les mesures de la cohérence du concept de soi, la dérégulation émotionnelle, le psychoticisme (ou tendance psychotique), la sévérité des symptômes et les troubles de la personnalité étaient conformes aux prévisions, et la sensibilité à l'état clinique a été confirmée.

Conclusion: L'IOP-Pt démontre des qualités psychométriques prometteuses et sa structure factorielle est cohérente avec des aspects importants du modèle de Kernberg, les résultats précédents et l'échelle des niveaux de fonctionnement de la personnalité du DSM-5.

Mots-clés: échelles de personnalité, troubles de la personnalité, organisation de la personnalité, niveaux de fonctionnement de la personnalité, études de validation

Uncovering Personality Structure with the Inventory of Personality Organization: An Exploration of Factor Structure with a Portuguese Sample

The recent fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association [APA], 2013) features an alternative model for the domain of personality disorders, previously addressed in strictly descriptive, a-theoretical, typological, and categorical terms (e.g., DSM-IV-TR, Axis II; APA, 2010). Expressing the growing interest in dimensional classification, Section III introduces the *level of personality functioning scale*, intended to assess personality pathology in a *severity continuum* above and beyond typological classification. Along this continuum, difficulties pertaining to the views of self and others, recognized as central to every personality disorder, are considered (Bender, Morey, & Skodol, 2011) – specifically, identity, self-direction, empathy, and intimacy are addressed (APA, 2013).

The understanding of personality pathology as a combination of two orthogonal axes representing type/style and severity has been a hallmark in psychoanalytic models (McWilliams, 2011; Westen, Gabbard, & Blagov, 2006). In particular, Otto F. Kernberg authored one of the most influential contributions to the study of the severity/health-sickness axis, also viewed as a developmental or maturational dimension (McWilliams, 2011). In his model, personality organization (PO) is described in a continuum ranging from normal-neurotic functioning, through high and low borderline levels, and ending in the psychotic pole (e.g., Caligor, Kernberg, & Clarkin, 2007; Clarkin, Yeomans, & Kernberg, 2006; Kernberg, 2004; Kernberg & Caligor, 2005). Although borderline-level PO underlies most of the personality disorders considered in the categorical-typological approach held in DSM's Axis II, including but not limited to the borderline personality disorder *stricto sensu* (Caligor et al., 2007), the PO dimension is sensible to a range of variations from healthy personality functioning and may be useful in identifying “subthreshold” personality difficulties (Blagov,

Bradley, & Westen, 2007) poorly covered by categorical approaches. Additionally, its structural approach may help in uncovering different meanings in common symptoms according to diverse underlying levels of PO (Kernberg, 2004).

Within this framework, variations in PO are a function of *identity consolidation* (the subjective experience of a stable and realistic sense of self and others, as opposed to unstable, polarized, and unrealistic representations), *defensive operations* (from mature defenses to the predominance of primitive defenses, i.e., unconscious emotion regulation strategies involving separation of positive and negative sectors of experience, or splitting), and *reality testing* (the capacity to differentiate self from nonself, to distinguish intrapsychic from external stimuli, and to maintain empathy with ordinary social criteria of reality) (Kernberg & Caligor, 2005; Stern et al., 2010). Progressing from neurotic to borderline PO, the predominance of primitive defenses and the concomitant identity disturbance increases; but only in psychotic PO is reality testing compromised, although in borderline PO it may be transiently affected under stress, particularly in the context of intimate relations, with a decreased capacity to evaluate interpersonal processes (Caligor et al., 2007; Clarkin et al., 2006; Kernberg & Caligor, 2005). Under the influence of primitive, intense emotions that are not integrated and that they cannot control, individuals with borderline PO characteristically manifest affect dysregulation accompanied by behavioral correlates such as expressions of anger, interpersonal chaos, and impulsive self-destructive behaviors (Clarkin et al., 2006).

As an effort at operationalization of these dimensions, Kernberg and Clarkin presented in 1995 what can be considered the first complete version of the *Inventory of Personality Organization* (IPO), a self-report questionnaire comprising 155 items divided into the three primary scales (57 items) of Primitive Defenses, Identity Diffusion, and Reality Testing, and additional secondary scales of interpersonal phenomena (Lenzenweger, Clarkin, Kernberg, & Foelsch, 2001). IPO has since been used to investigate the relationship of PO to

psychopathology and to measure structural change as a psychotherapy outcome (cf. Ellison & Levy, 2012), and it was adapted to several cultures (e.g., French Canadian, Chilean, Argentinian, Dutch, Japanese, Spanish, Brazilian, German, Italian) in different versions (Bendov et al., 2002; Berghuis, Kamphuis, Boedijn, & Verheul, 2009; García-García et al., 2010; Igarashi et al., 2009; Normandin et al., 2002; Oliveira & Bandeira, 2011; Preti et al. 2015; Quiroga, Solano, & Fonao, 2003; Smits, Vermote, Claes, & Vertommen, 2009; Zimmermann et al., 2013). The three primary scales' latent structure has been tested with both clinical and nonclinical populations, frequently yielding two- or three-factor solutions with Identity Diffusion and Primitive Defenses highly correlated or merged into a single dimension apart from Reality Testing (Berghuis et al., 2009; Igarashi et al., 2009; Lenzenweger et al., 2001; Normandin et al., 2002; Smits et al., 2009).

Meanwhile, few reported studies investigated alternative models of the three primary scales' dimensional organization through a plain exploratory approach, without forcing the items to conform to the theoretical subscales. The study of Berghuis et al. (2009) is an exception, but it was not confined to the primary scales. In consonance with other studies, though, most Identity Diffusion and Primitive Defenses items loaded in one factor (*General Personality Pathology*) apart from most Reality Testing items (*Reality Testing* or *Psychotic Vulnerability*). More recently, Ellison and Levy (2012) used an exploratory structural equation modeling approach with a large nonclinical sample precisely to test whether the originally intended dimension configuration would be recovered. Results of this study suggested that a four-factor solution may provide a better fit, with factors representing *Instability of Self and Others*, *Instability of Goals*, *Psychosis*, and *Instability of Behavior*. *Instability of Self and Others* was interpreted by the authors as a general factor, composed of items from every original subscale amounting to a total number of 32, 17 of which belonged to Identity Diffusion. The second factor comprised only two items from the Identity Diffusion

subscale specifically addressing the topic of goal volatility. Twelve Reality Testing items formed the Psychosis dimension. And eight items focusing on behavioral components, half of which integrated the Primitive Defenses dimension, were coded as Instability of Behavior (three items were dropped due to insufficient factor loadings). Although these factors do not match the original subscales, they represent important features of Kernberg's model and borderline functioning, as supported by the observed relations with external measures of self-concept coherence, immature defenses, emotion regulation, and risky and self-injurious behavior. Furthermore, a recent study of the Italian IPO (Preti et al., 2015) added support to this model in terms of fit indices, concurrent validity, and capacity to differentiate clinical from nonclinical participants, namely concerning borderline personality disorder.

Therefore, the latent structures found and intended for the primary scales of the IPO need further confirmation and clarification, preferably with large community samples that increase statistical power and where a wide variation from neurotic to borderline levels of personality functioning may be expected. Additionally, a Portuguese version of the IPO primary scales (IPO-Pt) may fill an important gap within the professional and scientific community, thus calling for validation studies. It is worth noting that Portuguese language is spread around the globe and is one of the most widely spoken – the sixth language in the world (the third of European languages), the third in the western hemisphere, the first in the south hemisphere, and the fifth in the internet (e.g., Internet World Stats, 2016; Lewis, Simons, & Fennig, 2016).

In this study, we aim to investigate the factor structure of IPO-Pt and test its reliability and validity in a large nonclinical sample. To this end, we will test previous IPO models in our sample through a series of confirmatory factor analyses (CFA); study the internal consistency, test-retest stability, and convergent and concurrent validity of competing models of IPO-Pt factor configuration, examining the associations with measures of related

phenomena (personality disturbance, self-concept coherence, psychoticism, emotion dysregulation, and symptom severity); and investigate the sensitivity of IPO-Pt to clinical status as defined through different criteria.

Method

Participants

The sample comprised 1172 individuals, 72.2% female, with ages ranging from 16 to 72 ($M = 27.05$, $SD = 9.56$). While 57.5% held a higher education degree, 42.3% completed secondary school (twelve years of education), and 0.2% had lower education levels. Students represented 68.9% of the sample and 28.9% were employed, 7.3% self-employed, 6.1% unemployed or inactive, 1.5% were entrepreneurs, and 1.0% were retired (the entries were not mutually exclusive). In terms of marital status, 75.2% of the participants were single, 22.3% were married, remarried, or in civil union, and 2.5% were divorced, legally separated, or widowed. Seven point six percent ($n = 89$) of the participants were currently receiving psychological and/or psychiatric help. A subsample of 72 individuals completed the test-retest, containing 91.7% of women and ranging from 18 to 55 years-old ($M = 26.15$, $SD = 8.36$). The mean reported time lapse between test and retest was 26.19 days ($SD = 10.19$). Three of the initial 75 cases were dropped due to insufficient time interval (less than 10 days).

Procedure

A convenience sample was formed through e-mail invitation. The study was presented as aiming at the adaptation of a measure of psychological assessment to European Portuguese. Dissemination proceeded through formal and informal channels, following the requirements of each particular context (e.g., ethics committees' and/or administrations' authorizations in universities). Each individual responded to a set of instruments (see below) in online format (*LimeSurvey 1.87*®) and was invited, before submitting the answers, to participate in the study for a second time by accessing the same link after a minimum of two weeks. An e-mail

account was created to allow the participants to contact the research team regarding any questions raised by the study.

Measures

IPO (Lenzenweger et al., 2001). The IPO is a self-report measure of personality organization as theorized by the group of Otto F. Kernberg (e.g., Caligor et al., 2007; Clarkin et al., 2006; Kernberg & Caligor, 2005). The three primary scales are *primitive defenses* (PD; 16 items), *identity diffusion* (ID; 21 items), and *reality testing* (RT; 20 items), amounting to 57 items classified along a Likert scale from 1 (*never true*) to 5 (*always true*). The Portuguese version was developed by reference to principles of good practice for the cross-cultural adaptation process (Wild et al., 2005): The items were translated into European Portuguese by two independent Psychology researchers. Consensus was reached with the participation of a third researcher, an expert in the field, in an effort to ensure both linguistic and functional equivalence (Geisinger, 2003). This version was then back-translated by a bilingual Psychologist and professional translator unfamiliar with any other version of IPO and sent to one of the authors (J. F. Clarkin) for accuracy check. After incorporating suggestions from the previous step, the 57 items were presented to five Portuguese adults as a pre-test, leading to minor wording adjustments in the final form of the measure (see Appendix A).

Self-Concept Clarity Scale (SCCS) (Campbell et al., 1996; Portuguese version by Barreto, Carvalho, & Matos, 2012). The SCCS is a 12-item self-report measure assessing whether a person's self-beliefs are clearly and confidently defined, internally consistent, and stable. Items are rated along a Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). In this study, self-concept clarity was selected for convergent validation of the identity disturbance measured in IPO, considered the central feature of borderline functioning within Kernberg's model (Kernberg & Caligor, 2005). Cronbach's alpha in our sample was good ($\alpha = .89$).

Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004; Portuguese version by Coutinho, Ribeiro, Ferreirinha, & Dias, 2010). The DERS is a self-report assessing emotion regulation strategies through the classification of 36 sentences in a Likert-type scale from 1 (*almost never*) to 5 (*almost always*). A six-factor structure of intercorrelated factors (*strategies, nonacceptance, awareness, impulse, goals, and clarity*) is often summarized in a total score. Emotional dysregulation is generally seen as an important feature in borderline personalities (e.g., Clarkin et al., 2006), which makes DERS an adequate measure for the concurrent validation of IPO. In our sample, the total scale's internal consistency was excellent ($\alpha = .94$).

Brief Symptom Inventory (BSI; Derogatis, 1993; Portuguese version by Canavarro, 1999). The BSI is a short version of the Symptom Checklist-90-Revised (SCL-R-90), measuring symptoms and psychological distress (Derogatis, 1993). It comprises 53 items rated on a 5-point scale of distress from 0 (*not at all*) to 4 (*extremely*), covering nine symptom dimensions (*somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism*) and three global indices of distress – Global Severity Index (GSI; the mean score of all items), Positive Symptom Distress Index (PSDI; the mean score of the items rated positively, i.e., ≥ 1), and Positive Symptom Total (PST; the number of items rated positively). In the Portuguese version, the PSDI showed a good capacity to discriminate between individuals with and without emotional disturbance (Canavarro, 2007), making it a useful reference for IPO concurrent validation. Additionally, the *psychoticism* score can be used for convergent validation of the IPO RT dimension. Finally, Personality Severity Index (PSI) and Current Symptom Index (CSI) elsewhere derived from the SCL-R-90 (Starcevic, Bogojevic, & Marinkovic, 2000) can be extracted from the BSI subscales (*interpersonal sensitivity, hostility, and paranoid ideation* mean scores for PSI; the remaining items mean scores for

CSI) and compared with IPO scores, assuming that these should be more related to the PSI. Since it is intended to be associated with personality pathology severity,¹ the PSI can actually work as a measure of convergent validation of the IPO. In our sample, the Cronbach's alphas found for the BSI subscales were good, ranging from .76 (*psychoticism*) to .88 (*depression*).

Statistical Analysis

The main models of the IPO primary scales previously found were tested with a series of CFAs. The weighted least squares means and variance adjusted (WLSMV) estimator was preferred over the more common maximum likelihood (ML) estimator in face of evidence suggesting the former's superiority in dealing with ordinal nonnormally distributed data (Flora & Curran, 2004; Moshagen & Musch, 2014). These assumptions apply to IPO, whose items are rated on a 5-point Likert scale and address difficulties expected to be less common in a nonclinical sample (Ellison & Levy, 2012).

Model fit was examined in terms of comparative fit index (CFI), Tucker-Lewis fit index (TLI), and root mean square error of approximation (RMSEA). We assumed CFI and TLI values between .90 and .95 to signify acceptable model fit, and good fit above .95; and that RMSEA values less than .08 indicate acceptable model fit, and below .05 suggest good model fit (Brown, 2015; Schweizer, 2010).

Cronbach's alphas were calculated for IPO and its dimensions. Pearson correlations were used to examine associations with other measures and test the temporal stability with the group of 72 participants who attended the study for a second time. Finally, with the purpose of investigating the sensitivity of IPO to clinical status, we divided the sample according to alternative clinical criteria and conducted ANCOVAs controlling for gender and age. The three criteria for dividing the total sample into clinical (C) and nonclinical (NC) groups were: BSI's PSDI cut-off point of 1.7 for emotional disturbance (Canavarro, 2007) – $n(C) = 415$,

¹ These indices were previously used in Berghuis et al. (2009) validation of the Dutch IPO, although in their case the SCL-90 was the chosen measure.

$n(NC) = 687$; currently receiving psychological and/or psychiatric help – $n(C) = 89$, $n(NC) = 1083$; and BSI-derived $PSI > CSI$ criterion used by Starcevic et al. (2000) as a screen for severe personality disorders, adopting the Payne-Jones method (Payne & Jones, 1957) to ensure a 95% reliability of the discrepancy between the two scores – $n(C) = 137$, $n(NC) = 965$.

All analyses were run with *IBM SPSS Statistics 21*, except for the CFAs (*Mplus 6.1*, Muthén & Muthén, 2010).

Results

Basic Statistics

Descriptive statistics of all the IPO items for our sample are presented in Table 1. Severe violation of normality was found for two items (RT8 and RT16). Since these items are specifically intended to address extreme experiences that are uncommon among the general population, we decided to keep them through subsequent analyses.

Insert Table 1 about here

Structural Validity

We tested different models in our sample, starting with a one-factor solution (all items loading on a single factor), followed by a two-factor model (PD and ID items forming one dimension apart from RT items), the original three-factor model (each subscale loading on a different factor), and the four-factor model found by Ellison and Levy (2012; see above). As presented in Table 2, all the models failed to reach an acceptable fit to the data in terms of CFI and TLI. The four-factor model showed apparently better indices, but even after several error correlations based on modification indices it didn't reach adequate fit.

Insert Table 2 about here

Therefore, we decided to split the sample in two random groups of 586 participants each and use them as derivation and cross-validation subsamples (Fabrigar, Wegener, MacCallum, & Strahan, 1999; Floyd & Widaman, 1995) in order to find a better fitting alternative model. With the first half, we examined the scree plot, which appeared to support the retention of two to four factors. On the other hand, a parallel analysis (*Parallel Analysis Engine* by Patil, Singh, Mishra, and Donovan, 2007) pointed to a five-factor solution². With these clues, we conducted a series of exploratory factor analyses (EFA) extracting from two to five factors, using principal axis factoring/common factor analysis. Promax rotation was selected given the prospect of correlations between IPO's dimensions coming both from theory and empirical findings. We didn't drop any items on the basis of minimum factor loadings, cross-loadings, violation of the normality assumption, or any other criteria.

All the emergent dimensions seemed to be interpretable and were named, as far as possible, after the designations of previous studies (particularly Ellison & Levy, 2012). As presented in Figure 1, a *Psychosis* factor remained nearly unchanged across the four models. The remaining dimension in the two-factor model was labeled *Instability of Self and Others* in a wider sense than originally employed by Ellison and Levy (2012; closely resembling a merge of the three "instability" factors) and similar to Berghuis et al.'s (2009) General Personality Pathology. However, from the three-factor model onwards (see Table 3 for the three-factor solution), this factor divided into dimensions that wouldn't be predicted by previous studies, namely through a separation between items reflecting concerns with self (e.g., discontinuity of self-experience, goal volatility, erratic, impulsive, or contradictory behavior) and others (e.g., dependency, idealization, abandonment, internal/external reality confusion). As shown in Figure 1, only in the five-factor model did Ellison and Levy's (2012)

² The first six eigenvalues for the real data were 16.27, 3.53, 2.06, 1.86, 1.57, and 1.43. The first six eigenvalues estimated for the random data at the 95th percentile based on Horn's parallel analysis were 1.72, 1.64, 1.60, 1.56, 1.52, and 1.48.

Instability of Goals dimension differentiate from a more general *Instability of Self*. Table 4 adds relevant data concerning the dimensions of each solution found through EFA.

Insert Figure 1 about here

Insert Table 3 about here

Insert Table 4 about here

The correlations between subscales within each model were calculated for the total sample, with coefficients ranging from $r = .76$ (Instability of Self with Instability of Others in the three-factor model) to $r = .32$ (Instability of Goals with Mistrust in the five-factor model) at the .001 level.

CFAs were performed for these models on the cross-validation sample, with the five-factor solution yielding acceptable fit to the data ($\chi^2 = 3781.73$, $df = 1529$, CFI = .906, TLI = .902, RMSEA = .050). However, as shown in Table 5, the three- and four-factor solutions also reached adequate fit after specification of error correlations between two items with similar wording that clearly stood out for higher modification indices (ID18 and ID19, the same items that composed Instability of Goals in the five-factor model). For comparison, we repeated the CFAs of the models from previous studies, this time using the second half of the sample and specifying error correlations. The fit indices remained mostly below acceptable levels.

Insert Table 5 about here

Considering these results, we decided to further compare the models derived from EFA in terms of reliability, external validity, and clinical sensitivity (see Appendix B for an extension of these analyses to the original IPO subscales).

Reliability

IPO dimensions' scores from the test-retest subsample and the remaining sample were compared, with no significant differences found. Internal consistency and temporal stability were calculated for each version (see Table 4). The coefficient of stability was generally acceptable or good, except for the Instability of Goals ($r = .62, p < .001$). Internal consistency values were overall good to excellent, with the Mistrust dimension showing the lowest levels, yet acceptable (above .70).

Convergent and Concurrent Validity

All models were investigated in their associations with the selected validation measures. The scores were calculated as the mean scores of each respective set of items and using the total sample. Results are shown in Table 6. Overall, the correlations found were significant at the .001 level, with most magnitudes ranging from .50 to .80 in the expected directions. Most of the few moderate correlation coefficients (below .50) concerned the Instability of Goals dimension.

Insert Table 6 about here

Sensitivity to Clinical Status

Results for the PSDI criterion revealed a main effect of clinical condition on IPO total score and on every dimension of each model examined. These effects were significant and in the expected direction. Within the psychological/psychiatric help criterion, Instability of Goals was the only IPO dimension with no significant differences across groups. Regarding

our last clinical condition criterion (PSI>CSI), Instability of Goals was again an exception, this time accompanied by the Psychosis dimensions from every IPO model (see Table 7).

We further tested the sensitivity of SCCS and DERS to clinical status, and found significant differences as a function of the first two criteria but not the PSI>CSI criterion (Table 7). Thus, IPO appeared to be more sensitive to the PSI>CSI criterion than SCCS and DERS.

Insert Table 7 about here

Discussion

In this study, we wanted to explore the factor structure of the Portuguese version of IPO and its psychometric properties in the light of previous findings. Alternative factor configurations emerged and were examined in terms of reliability and validity with the aim of selecting the most adequate model for IPO-Pt.

Concerning factor structure, our results were consistent both with previous findings and Kernberg's model in the tendency of ID and PD items to aggregate apart from most RT items (e.g., Berghuis et al., 2009; Ellison & Levy, 2012; Lenzenweger et al., 2001). However, in line with former exploratory studies (Berghuis et al., 2009; Ellison & Levy, 2012), the dimensions did not fully conform to the original theoretical subscales of IPO. Whereas most RT items formed a dimension describing psychotic experiences of varying degrees, the ID and PD items tended to aggregate in new dimensions that resemble but do not entirely match results from prior studies.

Still, the division into Instability of Self and Instability of Others seems quite consistent with Kernberg's object relations theory in the assumption that internalized self-other images are the building blocks of personality structures (Clarkin et al., 2006). In fact, the notion that problems in self-other representations are central to personality disturbance is

widely recognized (see Bender et al., 2011), as reflected in the DSM-5 level of personality functioning scale. The Dependency and Mistrust dimensions from our four-factor model may be interpreted as a reflection of the polarized representations of (self and) others described in Kernberg's model of borderline functioning (e.g., Kernberg & Caligor, 2005) – in this case, “all-good” idealized and “all-bad” persecutory underlying representations, respectively. Still, the connection with Kernberg's model is less clear and rather speculative in this factor model. Namely, a *stylistic* difference may be at stake rather than the kind of *severity* difference intended in IPO. Finally, our five-factor model reproduces Ellison and Levy's (2012) Instability of Goals factor. Like the authors, and based on our results concerning clinical sensitivity and convergent and concurrent validity (see below), we believe this dimension, which comprises only two items (DI18 and DI19, as mentioned), may be an artifact of item wording, although their alternative “developmental” explanation must be kept in mind considering the high proportion of students in our sample. In any case, our results may challenge the idea of identity diffusion as a one-dimensional construct, in line with previous studies (Ellison & Levy, 2012; Preti et al., 2015).

Examining the relations of the IPO-Pt models with external measures, the first result worth noting is that the pattern of associations is generally consistent with what would be anticipated concerning the overall significance of the correlations found in the expected directions and with large magnitudes. However, despite the results concerning clinical sensitivity (discussed below), the discriminant validity was beneath expectations. Namely, we did not find a clear pattern of differential correlations across IPO dimensions, and we expected more contrast in coefficients concerning PSI and CSI.

Among the specific dimensions, Instability of Goals appears to be problematic in more than one sense. As mentioned, it presents a pattern of lower correlations both with external measures and other IPO dimensions, despite good internal consistency. Additionally, it is the

only dimension with questionable temporal stability and it fails to discriminate clinical from nonclinical groups in two criteria, including the criterion intended to represent personality difficulties (PSI>CSI). Finally, its composition is below the desirable minimum of three items (e.g., Costello & Osborne, 2005). Thus, its performance as a separated factor seems questionable. With alternative simpler good-fitting models available, we believe these may be preferable choices.

The Instability of Self and Others from our two-factor model behaved as expected from a general factor of personality disturbance, discriminating clinical from nonclinical samples in all criteria, correlating strongly with self-concept clarity, emotion dysregulation, and symptom distress, and seemingly more closely associated with personality disturbance (PSI) than with current symptoms (CSI). However, the two-factor model didn't reach reference fitting values (Brown, 2015; Schweizer, 2010). Furthermore, convergent, concurrent, and discriminant validity were maintained throughout the remaining three- and four-factor models.

Having both reached adequate fit indices, our three- and four-factor solutions share a Psychosis dimension with the exact same item composition. Also, Instability of Self factors share the same label in both solutions, but in the latter only 16 of the former's 21 items are retained. Differences between these in performance are apparently negligible. In the four-factor solution, Dependency seems more closely associated with emotion dysregulation than the remaining dimensions, possibly reflecting the difficulties managing intimacy mentioned earlier (Clarkin et al., 2006). Along with the three-factor model's Instability of Others, it also presents the largest mean score difference between clinical and nonclinical emotional disturbance-criterion groups. For its part, Mistrust appears to show a tendency for lower correlations with the selected external measures, but it has the largest mean score difference between clinical and nonclinical PSI>CSI-criterion groups. It is possible, then, that

Dependency and Mistrust add to the discriminant capacity of IPO. However, evidence is clearly insufficient. We thus believe the three-factor model is better both in terms of parsimony and coherence with Kernberg's theory of personality organization.

Regarding the Psychosis dimensions, as expected, correlations with the BSI Psychoticism subscale were significant and positive. But other IPO dimensions presented comparable correlations with BSI Psychoticism. Additionally, Psychosis dimensions were the sole whose scores were not significantly different across clinical and nonclinical PSI>CSI-criterion groups, confirming the tendency for similar if not lower correlations with PSI compared to CSI. One possible explanation might be that our IPO Psychosis factor captured a set of uncommon and somehow extreme symptoms that, as stated by Kernberg and Caligor (2005), represent exclusion criteria for personality disorders strictly speaking. In this sense, our results can actually give support to Kernberg's model, since the PSI>CSI groups are likely to differentiate normal-neurotic from borderline functioning. For its part, the BSI Psychoticism scale reflects a continuous dimension of human experience ranging from mild interpersonal alienation to typical positive schizophrenic symptoms (e.g., hallucinations) (Canavaro, 2007). Therefore, it may be that in our sample the BSI Psychoticism is reflecting a psychosis proneness dimension that may heighten the severity of borderline functioning rather than structurally differentiate Kernberg's psychotic PO as such – hence the correlations with other IPO dimensions.

As stated, our comparisons of clinical and nonclinical groups are in favour of the sensitivity to clinical status of IPO and its dimensions, except for the cases aforementioned. This finding is particularly relevant considering the diversity of criteria tested for the clinical-nonclinical differentiation. The PSI>CSI criterion may be of particular importance for our purposes, since it is specifically intended to discriminate personality difficulties. That SCCS and DERS discriminated clinical from nonclinical groups *except* for this criterion may be one

of the main points in favour of the specificity of IPO-Pt in measuring the phenomena it is intended to address.

Our study has a number of limitations. First, our clinical subsamples were not composed of reliably diagnosed personality-disturbed patients of different types and severity levels. This would allow further validation and understanding of IPO-Pt and its dimensions. Moreover, it might help us define useful cut-off points for personality disorders. IPO-Pt would also benefit from additional convergent and divergent validation – in fact, although the comparison between correlations may signal relevant tendencies, particularly when consistent with theory and supported by additional findings, discriminant validity in this study was low. Finally, a shorter version of IPO would be helpful aiming at a more clear structure and whenever time and subjects' fatigue may be a concern. A second order *Global Personality Organization* factor expressing personality disturbance severity might be particularly useful within the new DSM-5 approach to personality disorders.

In conclusion, from the work presented here an apparently robust three-factor version of IPO was selected among alternative models and becomes available for Portuguese and Portuguese-speaking clinicians and researchers, and the discussion concerning the nuclear psychological dimensions underlying personality dysfunction is brought to head. While our results do not replicate the DSM-5 dimensions, they certainly reflect important features of identity, self-direction, and intimacy (APA, 2013), at the same time confirming nuclear aspects of Otto F. Kernberg's model of personality organization.

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Table 1

Descriptive Data of the IPO Items (N = 1172)

Sca	Nr	Item	Mean	SD	Min	Max	Skew	Kur
PD	1	I am a "hero worshiper" even if I am later found wrong in my judgment.	2.16	0.90	1	5	0.38	-0.48
PD	2	I feel that people I once thought highly of have disappointed me by not living up to what I expected of them.	2.97	0.79	1	5	-0.16	-0.05
PD	3	I feel it has been a long time since anyone really taught or told me anything I did not already know.	2.25	0.96	1	5	0.40	-0.63
PD	4	It is hard for me to trust people because they so often turn against me or betray me.	2.42	0.97	1	5	0.49	-0.21
PD	5	I need to admire people in order to feel secure.	2.45	1.12	1	5	0.36	-0.74
PD	6	I find myself doing things which at other times I think are not too wise like having promiscuous sex, lying, drinking, having temper tantrums or breaking the law in minor ways.	1.72	0.89	1	5	1.08	0.38
PD	7	People tell me I have difficulty in seeing shortcomings in those I admire.	2.09	0.99	1	5	0.72	-0.07
PD	8	I feel I don't get what I want.	2.72	0.98	1	5	0.17	-0.41
PD	9	People tell me I behave in contradictory ways.	2.02	0.86	1	5	0.64	0.16
PD	10	I think people are basically either good or bad: there are few who are really in between.	2.28	1.05	1	5	0.53	-0.45
PD	11	People tend to use me unless I watch out for it.	2.41	1.02	1	5	0.48	-0.35
PD	12	I act in ways that appear to others as unpredictable and erratic.	2.03	0.85	1	5	0.72	0.43
PD	13	I have favorite people whom I not only admire, but almost idealize.	2.37	1.06	1	5	0.37	-0.65

PD	14	I find myself doing things which feel okay while I am doing them but which I later find hard to believe I did.	2.41	0.88	1	5	0.29	-0.25
PD	15	People tend to respond to me by either overwhelming me with love or abandoning me.	1.98	0.96	1	5	0.95	0.55
PD	16	I tend to feel things in a somewhat extreme way, experiencing either great joy or intense despair.	2.48	1.12	1	5	0.39	-0.65
ID	1	I feel like a fake or imposter, that others see me as quite different from the way I really am.	1.86	0.97	1	5	1.00	0.34
ID	2	I feel I'm a different person at home as compared to how I am at work or at school.	2.52	1.17	1	5	0.33	-0.81
ID	3	I feel that my tastes and opinions are not really my own, but have been borrowed from other people.	1.72	0.83	1	5	1.18	1.35
ID	4	Some of my friends would be surprised if they knew how differently I behave in different situations.	2.15	1.09	1	5	0.76	-0.15
ID	5	I fluctuate between being warm and giving at some times, and being cold and indifferent at other times.	2.59	1.08	1	5	0.27	-0.61
ID	6	People tell me I provoke or mislead them so as to get my way.	1.46	0.74	1	5	1.71	2.86
ID	7	I can't explain the changes in my behavior.	2.14	1.11	1	5	0.79	-0.11
ID	8	I do things on impulse that I think are socially unacceptable.	1.66	0.81	1	5	1.22	1.24
ID	9	I get into relationships with people I don't really like because it's hard for me to say no.	1.65	0.87	1	5	1.29	1.17
ID	10	My life, if it were a book, seems to me more like a series of short stories written by different authors than like a long novel.	2.14	1.14	1	5	0.77	-0.28
ID	11	I pick up hobbies and interests and then drop them.	2.34	1.01	1	5	0.52	-0.27
ID	12	When others see me as having succeeded, I'm elated and, when they see me as failing, I feel devastated.	2.65	1.09	1	5	0.30	-0.55

ID	13	I am afraid that people who become important to me will suddenly change in their feelings towards me.	2.98	1.22	1	5	0.05	-0.95
ID	14	It is hard for me to be sure about what others think of me, even people who have known me very well.	2.79	1.08	1	5	0.21	-0.68
ID	15	Being alone is difficult for me.	2.65	1.16	1	5	0.33	-0.67
ID	16	I see myself in totally different ways at different times.	2.63	1.09	1	5	0.30	-0.57
ID	17	In the course of an intimate relationship, I'm afraid of losing a sense of myself.	2.05	1.10	1	5	0.87	-0.05
ID	18	My life goals change frequently from year to year.	2.01	0.89	1	5	0.79	0.44
ID	19	My goals keep changing.	1.87	0.88	1	5	1.09	1.22
ID	20	After becoming involved with people, I am surprised to find out what they are really like.	2.56	0.88	1	5	0.28	0.10
ID	21	Even people who know me well cannot guess how I'm going to behave.	2.15	0.93	1	5	0.77	0.42
RT	1	When everything around me is unsettled and confused, I feel that way inside.	2.93	1.01	1	5	0.09	-0.33
RT	2	I am not sure whether a voice I have heard, or something that I have seen is my imagination or not.	1.65	0.86	1	5	1.24	0.95
RT	3	When I'm nervous or confused, it seems like things in the outside world don't make sense either.	2.40	1.06	1	5	0.37	-0.59
RT	4	I feel almost as if I'm someone else, like a friend or relative, or even someone I don't know.	1.51	0.81	1	5	1.76	3.11
RT	5	I think I see things which, when I take a closer look, turn out to be something else.	1.93	0.94	1	5	0.75	-0.15
RT	6	When I am uncomfortable, I can't tell whether it is emotional or physical.	2.10	1.06	1	5	0.76	-0.14
RT	7	I can see things or hear things that nobody else can see or hear.	1.40	0.80	1	5	2.20	4.61
RT	8	I hear things that other people claim are not really there.	1.24	0.61	1	5	3.03	10.07

RT	9	I have heard or seen things when there is no apparent reason for it.	1.42	0.78	1	5	2.01	3.85
RT	10	I find that I do things which get other people upset and I don't know why such things upset them.	1.55	0.82	1	5	1.66	2.82
RT	11	I can't tell whether certain physical sensations I'm having are real, or whether I am imagining them.	1.48	0.76	1	5	1.61	2.16
RT	12	I feel that my wishes or thoughts will come true as if by magic.	1.66	0.88	1	5	1.19	0.62
RT	13	People see me as being rude or inconsiderate, and I don't know why.	1.59	0.82	1	5	1.42	2.06
RT	14	I understand and know things that nobody else is able to understand or know.	1.73	0.98	1	5	1.32	1.10
RT	15	I know that I cannot tell others certain things about the world that I understand but that to others would appear crazy.	1.84	1.09	1	5	1.16	0.44
RT	16	I have seen things which do not exist in reality.	1.20	0.59	1	5	3.66	15.23
RT	17	I feel as if I have been somewhere or done something before when I really haven't.	1.78	1.03	1	5	1.16	0.44
RT	18	I can't tell whether I simply want something to be true, or whether it really is true.	1.44	0.77	1	5	2.01	4.14
RT	19	I believe that things will happen simply by thinking about them.	1.55	0.84	1	5	1.63	2.40
RT	20	Somehow, I never know quite how to conduct myself with people.	2.07	1.07	1	5	0.85	0.03

Note. Sca = Subscale in the original IPO; Nr = Item number in the original IPO; PD = Primitive Defenses; ID = Identity Diffusion; RT = Reality Testing

Table 2

Fit Indices of Prior IPO CFA Models (N = 1172)

Model	χ^2	<i>df</i>	CFI	TLI	RMSEA
1 factor	11960.861	1539	.779	.771	.076
2 factors	9420.680	1538	.833	.827	.066
3 factors	9193.919	1536	.838	.831	.065
4 factors	7645.681	1371	.863	.857	.062

Table 3

Factor Loadings of the IPO Items on a Three-Factor Model

Original Subscale	Item Nr	Factor		
		IO	IS	Psy
ID	13	.712	-.017	-.056
RT	1	.677	-.003	-.066
ID	12	.630	-.003	-.010
ID	15	.600	-.118	-.037
ID	14	.537	.228	-.092
PD	5	.520	-.133	-.005
PD	11	.512	-.033	.058
PD	16	.481	.201	.050
PD	8	.478	.211	-.129
PD	2	.469	-.048	.039
RT	3	.461	.037	.194
PD	13	.453	-.091	.119
RT	6	.447	.032	.120
PD	7	.442	-.071	.043
PD	1	.399	-.043	.039
ID	20	.372	.135	.136
RT	20	.346	.245	.109
ID	3	.340	.219	-.053
PD	4	.307	.120	.072
PD	15	.287	.250	.148
PD	10	.193	.050	.113
ID	21	-.118	.689	.114
ID	8	-.063	.659	-.006

ID	5	.020	.651	-.034
ID	10	-.014	.631	-.023
PD	9	-.033	.612	-.053
PD	12	-.122	.604	.130
ID	6	-.210	.598	.126
ID	7	.187	.564	-.033
ID	19	.003	.562	.015
ID	4	.210	.553	-.114
ID	1	.147	.546	-.080
ID	18	.040	.498	-.007
RT	13	-.270	.497	.337
ID	2	.256	.440	-.194
ID	16	.381	.417	-.098
PD	6	.028	.396	.079
PD	14	.232	.391	.009
ID	11	.225	.391	-.093
ID	17	.284	.332	.041
ID	9	.223	.261	.025
PD	3	-.005	.229	.128
RT	8	-.096	-.110	.835
RT	7	-.074	-.078	.815
RT	9	-.073	-.074	.736
RT	16	-.093	-.025	.718
RT	14	-.097	.186	.620
RT	18	.194	-.033	.592
RT	17	.096	-.039	.577
RT	15	-.050	.203	.577

RT	5	.132	.076	.538
RT	12	.225	-.033	.509
RT	10	-.106	.379	.500
RT	11	.248	.001	.493
RT	19	.256	-.143	.492
RT	2	.191	.031	.469
RT	4	.245	.153	.334

Note. Promax rotated Principal Axis Factoring in a derivation subsample ($n = 586$). Primary factor loadings are in boldface. Nr = Item number in the original IPO; IO = Instability of Others; IS = Instability of Self; Psy = Psychosis; PD = Primitive Defenses; ID = Identity Diffusion; RT = Reality Testing.

Table 4

Comparative Data of IPO EFA Models on Items per Dimension, Percentage of Total Variance, Internal Consistency, and Test-retest Coefficients

Model	Label after interpretation	N items	IPO subscales			% variance (Split 1)	α			Test-retest ^a (n=72)
			PD	ID	RT		Total (N=1172)	Split 1 (n=586)	Split 2 (n=586)	
2 factors	Instability of Self and Others	41	16	21	4	34.7	.94	.94	.94	.79
	Psychosis	16	0	0	16		.91	.91	.91	.76
3 factors	Instability of Self	21	5	15	1	38.3	.90	.90	.90	.82
	Instability of Others	21	11	6	4		.89	.89	.90	.76
	Psychosis	15	0	0	15		.91	.91	.91	.76
4 factors	Instability of Self	16	4	11	1	41.6	.89	.89	.89	.79
	Dependency	18	5	9	4		.89	.89	.90	.82
	Mistrust	8	7	1	0		.74	.75	.74	.71
	Psychosis	15	0	0	15		.91	.91	.91	.76
5 factors	Instability of Self	15	5	9	1	44.4	.87	.88	.87	.79
	Instability of Goals	2	0	2	0		.88	.88	.87	.62
	Dependency	18	5	9	4		.89	.89	.90	.82
	Mistrust	7	6	1	0		.74	.75	.72	.69
	Psychosis	15	0	0	15		.91	.91	.91	.76
IPO	Total	57	16	21	20	–	.95	.95	.95	.81

Note. Split 1 = Derivation subsample; Split 2 = Cross-validation subsample; PD = Primitive Defenses; ID = Identity Diffusion; RT = Reality Testing.

^aPearson correlations (one-tailed) ($p < .001$)

Table 5

Fit Indices of IPO Models in the Cross-validation Sample (n = 586)

Model	χ^2	df	CFI	TLI	RMSEA
EFA	2 factors	4749.459	.867	.862	.060
		4016.397	.897	.893	.052
	3 factors	4515.238	.876	.871	.058
		3845.820	.904	.900	.051
	4 factors	4380.262	.882	.877	.056
	3751.973	.908	.904	.050	
5 factors	3781.734	1529	.906	.902	.050
Prior	1 factor	6269.216	.802	.795	.073
		5489.536	.836	.830	.066
	2 factors	5164.244	.849	.844	.063
		4451.239	.879	.874	.057
	3 factors	5083.361	.853	.847	.063
	4396.203	.881	.876	.056	
4 factors ^a	4331.792	1371	.874	.868	.061
	3741.831	1363	.898	.893	.055

Note. Fit indices with error correlations (ID18 with ID19) are in boldface. In the top panel, models derived from EFA (Table 3); in the lower panel, models from previous studies (Table 2).

^aFor this model, eight error correlations were specified (second line) according to the magnitude of modification indices (values of increment above 100, which excluded ID18 with ID19).

Table 6

Correlations with Validity Measures (Pearson's Two-Tailed) (N = 1102)

Model	Dimension	SCCS	DERS	BSI			
				Psychot	PSDI	PSI	CSI
2 factors	Instability of Self and Others	-.77*	.72*	.73*	.64*	.74*	.71*
	Psychosis	-.55*	.50*	.62*	.49*	.57*	.59*
3 factors	Instability of Self	-.74*	.64*	.68*	.57*	.67*	.64*
	Instability of Others	-.70*	.72*	.69*	.63*	.73*	.69*
	Psychosis	-.55*	.50*	.62*	.48*	.56*	.59*
4 factors	Instability of Self	-.71*	.61*	.65*	.54*	.65*	.61*
	Dependency	-.77*	.75*	.72*	.64*	.72*	.72*
	Mistrust	-.43*	.48*	.49*	.45*	.58*	.47*
	Psychosis	-.55*	.50*	.62*	.48*	.56*	.59*
5 factors	Instability of Self	-.68*	.60*	.65*	.55*	.65*	.59*
	Instability of Goals	-.48*	.37*	.35*	.26*	.33*	.36*
	Dependency	-.77*	.75*	.72*	.64*	.72*	.72*
	Mistrust	-.44*	.49*	.49*	.45*	.59*	.48*
	Psychosis	-.55*	.50*	.62*	.48*	.56*	.59*
IPO	Total	-.76*	.71*	.75*	.64*	.75*	.73*

Note. SCCS = Self-Concept Clarity Scale; DERS = Difficulties in Emotion Regulation Scale; BSI = Brief Symptom Inventory; Psychot = Psychoticism; PSDI = Positive Symptom Distress Index; PSI = Personality Severity Index; CSI = Current Symptom Index.

* $p < .001$

Table 7

Differences in Clinical and Nonclinical Groups

Model	Dimension	Clinical Status	PSDI NC (n = 687) vs C (n = 415)		Psy NC (n = 1083) vs C (n = 89) ^a		PSI>CSI NC (n = 965) vs C (n = 137)	
			<i>M</i> (<i>SD</i>)	<i>F</i>	<i>M</i> (<i>SD</i>)	<i>F</i>	<i>M</i> (<i>SD</i>)	<i>F</i>
2 factors	Instability of Self and Others	NC	2.03 (0.40)	406.95***	2.25 (0.52)	20.43***	2.23 (0.54)	20.47***
		C	2.63 (0.54)		2.47 (0.66)		2.45 (0.53)	
	Psychosis	NC	1.40 (0.41)	156.26***	1.55 (0.54)	8.38**	1.55 (0.55)	0.39
		C	1.81 (0.66)		1.68 (0.65)		1.60 (0.54)	
3 factors	Instability of Self	NC	1.85 (0.44)	306.37***	2.04 (0.55)	15.47***	2.03 (0.56)	15.76***
		C	2.40 (0.59)		2.24 (0.70)		2.24 (0.57)	
	Instability of Others	NC	2.19 (0.44)	386.11***	2.42 (0.56)	20.47***	2.40 (0.57)	22.05***
		C	2.82 (0.56)		2.68 (0.68)		2.63 (0.56)	
	Psychosis	NC	1.40 (0.42)	149.17***	1.55 (0.55)	8.15**	1.55 (0.56)	0.21
		C	1.81 (0.67)		1.68 (0.66)		1.58 (0.54)	
4 factors	Instability of Self	NC	1.82 (0.45)	256.92***	2.00 (0.57)	12.99***	1.99 (0.57)	20.00***
		C	2.35 (0.62)		2.19 (0.72)		2.23 (0.62)	
	Dependency	NC	2.13 (0.47)	431.52***	2.37 (0.61)	24.89***	2.38 (0.63)	6.16*
		C	2.83 (0.61)		2.68 (0.74)		2.51 (0.62)	
	Mistrust	NC	2.19 (0.47)	175.02***	2.36 (0.56)	6.82**	2.31 (0.55)	58.06***
		C	2.62 (0.60)		2.50 (0.67)		2.69 (0.54)	
	Psychosis	NC	1.40 (0.42)	149.17***	1.55 (0.55)	8.15**	1.55 (0.56)	0.21
		C	1.81 (0.67)		1.68 (0.66)		1.58 (0.54)	
5 factors	Instability of Self	NC	1.84 (0.45)	274.39***	2.03 (0.56)	14.31***	2.01 (0.57)	28.10***
		C	2.38 (0.62)		2.22 (0.73)		2.29 (0.62)	
	Instability of Goals	NC	1.79 (0.73)	50.38***	1.94 (0.83)	0.52	1.93 (0.84)	0.01
		C	2.17 (0.94)		1.98 (0.94)		1.93 (0.83)	
	Dependency	NC	2.13 (0.47)	431.52***	2.37 (0.61)	24.89***	2.38 (0.63)	6.16*
		C	2.83 (0.61)		2.68 (0.74)		2.51 (0.62)	

		C	2.83 (0.61)		2.68 (0.74)		2.51 (0.62)	
	Mistrust	NC	2.20 (0.49)	163.90***	2.37 (0.59)	7.49**	2.32 (0.58)	53.72***
		C	2.65 (0.63)		2.53 (0.68)		2.71 (0.56)	
	Psychosis	NC	1.40 (0.42)	149.17***	1.55 (0.55)	8.15**	1.55 (0.56)	0.21
		C	1.81 (0.67)		1.68 (0.66)		1.58 (0.54)	
IPO	Total	NC	1.86 (.37)	389.42***	2.05 (.49)	19.28***	2.04 (.50)	14.14***
		C	2.40 (.52)		2.25 (.62)		2.21 (.48)	
SCCS	Total	NC	49.59 (7.00)	351.05***	46.13 (9.30)	20.02***	45.91 (9.58)	0.60
		C	39.60 (9.84)		42.14 (11.06)		45.26 (9.01)	
DERS	Total	NC	69.27 (15.49)	413.66***	77.17 (20.85)	37.46***	77.89 (21.57)	2.11
		C	93.05 (21.93)		90.88 (25.25)		80.59 (21.07)	

Note. NC = Nonclinical; C = Clinical; PSDI = Emotional disturbance criterion; Psy = Psychological and/or psychiatric help criterion; PSI>CSI = Personality disturbance criterion.

^a For SCCS and DERS, n (NC) = 1017.

* $p < .05$. ** $p < .01$. *** $p < .001$

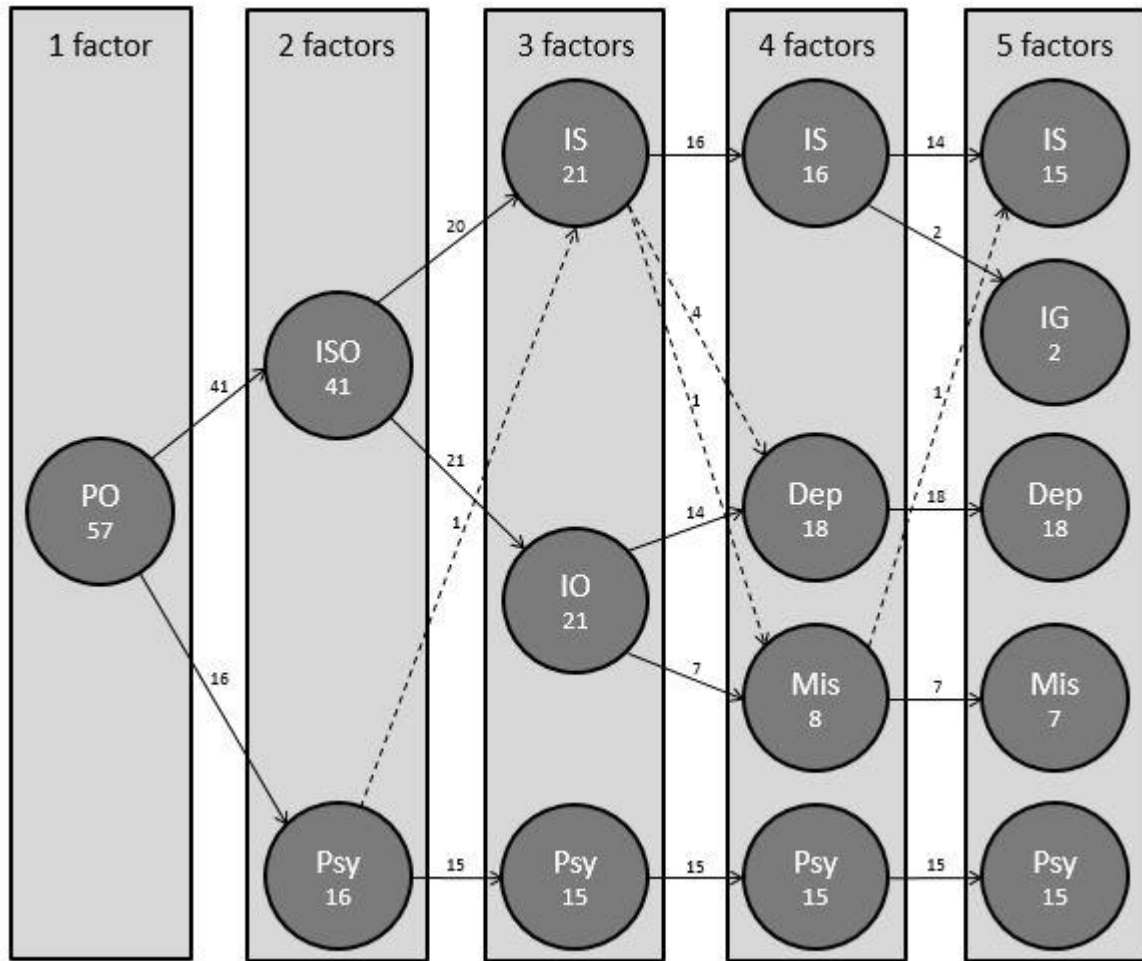


Figure 1. Item Migrations Across IPO Models. Numbers represent quantity of items. PO = Personality Organization; ISO = Instability of Self and Others; Psy = Psychosis; IS = Instability of Self; IO = Instability of Others; Dep = Dependency; Mis = Mistrust; IG = Instability of Goals.

Appendix A

Inventário de Organização da Personalidade, Versão Portuguesa (IPO-Pt) *Escalas de Teste de Realidade, Difusão da Identidade e Defesas Primitivas*

Instruções: Este questionário contém afirmações acerca de uma variedade de atitudes, sentimentos e comportamentos que as pessoas têm nas suas vidas. Leia cada uma cuidadosamente e responda o que melhor se aplica a si. Não tem que ser um(a) “especialista” para responder às perguntas - importa apenas que o faça o mais honesta e espontaneamente possível. Pedimos-lhe que se expresse com a máxima abertura. Ao pensar sobre si e as suas experiências, NÃO dê importância a atitudes, sentimentos ou comportamentos que possa ter tido apenas quando sob o efeito de álcool ou outras drogas (exs., marijuana, LSD, Ecstasy, cocaína, crack, heroína, anfetaminas).

- 1 – Nunca Verdade
- 2 – Raramente Verdade
- 3 – Por Vezes Verdade
- 4 – Frequentemente Verdade
- 5 – Sempre Verdade

Subescala das Defesas Primitivas

1. Tendo a idolatrar/idealizar os outros, mesmo que depois se verifique que estava enganado.
2. Sinto que pessoas que eu tinha em boa conta me desiludiram por não estarem à altura do que eu esperava delas.
3. Sinto que há muito tempo que ninguém me ensina ou diz algo que eu ainda não soubesse.
4. É difícil para mim confiar nas pessoas, porque frequentemente elas se viram contra mim ou me traem.
5. Para me sentir seguro/a, preciso de ter uma forte admiração pelas pessoas.
6. Dou por mim a fazer coisas que noutras alturas acho pouco sensatas, tais como ter sexo promíscuo, mentir, beber, ter acessos de raiva ou infringir a lei com delitos menores.
7. As pessoas dizem-me que eu tenho dificuldade em ver defeitos naqueles que admiro.
8. Sinto que não consigo o que quero.
9. As pessoas dizem-me que eu tenho comportamentos contraditórios.
10. Acho que as pessoas são basicamente boas ou más: são poucas as que estão no meio.
11. As pessoas têm tendência a usar-me a menos que eu tenha cuidado com isso.
12. Aos olhos dos outros, eu ajo de forma imprevisível e errática.
13. Tenho pessoas favoritas que não só admiro como quase idealizo.
14. Dou por mim a fazer coisas que me soam bem na altura mas que, mais tarde, mal acredito que fiz.
15. As pessoas tendem ou a sufocar-me com amor ou a abandonar-me.
16. Tenho tendência para sentir as coisas de modo algo extremo, entre uma grande alegria e um desespero intenso.

Subescala da Difusão da Identidade

1. Sinto-me como uma farsa ou um(a) impostor(a); os outros vêem-me de forma bem diferente do que realmente sou.
2. Sinto que em casa sou uma pessoa diferente da que sou no trabalho ou na escola.
3. Sinto que os meus gostos e opiniões não são realmente meus, foram tomados de outras pessoas.
4. Alguns dos meus amigos ficariam surpreendidos se soubessem como é diferente o meu comportamento em diferentes situações.
5. Oscilo entre ser afável e generoso/a algumas vezes e frio/a e indiferente noutras.
6. As pessoas dizem-me que eu as provoço ou induzo em erro para levar a minha avante.

7. Não consigo explicar as variações do meu comportamento.
8. Faço coisas por impulso que acho socialmente inaceitáveis.
9. Envolve-me em relações com pessoas de quem na verdade não gosto porque tenho dificuldade em dizer não.
10. Se fosse um livro, a minha vida seria mais uma série de pequenas histórias escritas por autores diferentes do que um único romance.
11. Inicio actividades e interesses e depois desisto deles.
12. Quando os outros acham que eu tive sucesso fico eufórico/a, e quando acham que eu falhei sinto-me arrasado/a.
13. Tenho medo que as pessoas que se tornam importantes para mim mudem de repente os seus sentimentos para comigo.
14. Tenho dificuldade em saber ao certo o que os outros pensam de mim, mesmo pessoas que já me conhecem muito bem.
15. Estar sozinho/a é difícil para mim.
16. Vejo-me de maneiras totalmente diferentes em momentos diferentes.
17. Tenho medo de perder a noção de quem sou no decurso de uma relação íntima.
18. Os meus objectivos de vida mudam frequentemente de ano para ano.
19. Os meus objectivos estão sempre a variar.
20. Depois de me envolver com as pessoas, fico surpreendido/a ao descobrir como elas são realmente.
21. Mesmo as pessoas que me conhecem bem não conseguem prever como é que eu vou agir.

Subescala do Teste de Realidade

1. Quando tudo à minha volta está instável e confuso, sinto-me também assim por dentro.
2. Não sei ao certo se uma voz que ouvi ou algo que vi é imaginação minha ou não.
3. Quando estou nervoso/a ou confuso/a parece que as coisas do mundo exterior também não fazem sentido.
4. Sinto-me quase como se fosse outra pessoa, como um amigo, um parente ou mesmo alguém que eu não conheço.
5. Julgo ver coisas que, quando reparo melhor, afinal não são o que eu pensava.
6. Quando não estou bem, não sei dizer se o que sinto é emocional ou físico.
7. Consigo ver ou ouvir coisas que mais ninguém consegue ver ou ouvir.
8. Ouço coisas que as outras pessoas afirmam não estarem presentes.
9. Já ouvi ou vi coisas sem razão aparente.
10. Reparo que faço coisas que perturbam as outras pessoas e não sei porquê que elas reagem assim.
11. Não sei dizer se certas sensações físicas que tenho serão reais ou se as estarei a imaginar.
12. Sinto que os meus desejos ou pensamentos se irão tornar realidade como se por magia.
13. As pessoas acham-me bruto/a ou indelicado/a e eu não sei porquê.
14. Eu percebo e sei de coisas que mais ninguém é capaz de perceber ou saber.
15. Sei que não posso dizer aos outros certas coisas que percebo acerca do mundo porque lhes iriam parecer loucas.
16. Já vi coisas que não existem na realidade.
17. Sinto-me como se já tivesse estado num sítio ou feito alguma coisa sem que isso tenha acontecido realmente.
18. Não sei dizer se simplesmente quero que uma coisa seja verdade ou se ela é mesmo verdade.
19. Acredito que as coisas vão acontecer simplesmente por pensar nelas.
20. Parece que nunca sei bem como comportar-me com as pessoas.

Appendix B

Supplemental Tables

Table B1

Internal Consistency and Test-retest Coefficients of IPO Original Subscales

Scale	N items	α			Test-retest ^a (n=72)
		Total (N=1172)	Split 1 (n=586)	Split 2 (n=586)	
Primitive Defenses	16	.84	.83	.84	.68
Identity Diffusion	21	.91	.91	.90	.82
Reality Testing	20	.92	.91	.92	.76
Total	57	.95	.95	.95	.81

Note. Split 1 = Derivation subsample; Split 2 = Cross-validation subsample.

^aPearson correlations (one-tailed) ($p < .001$)

Table B2

Correlations of Original IPO Subscales with Validity Measures (Pearson's Two-Tailed) (N = 1102)

Scale	SCCS	DERS	BSI			
			Psychot	PSDI	PSI	CSI
Primitive Defenses	-.61*	.62*	.62*	.56*	.67*	.61*
Identity Diffusion	-.77*	.68*	.70*	.60*	.70*	.67*
Reality Testing	-.64*	.61*	.69*	.56*	.65*	.68*
Total	-.76*	.76*	.75*	.64*	.75*	.73*

Note. SCCS = Self-Concept Clarity Scale; DERS = Difficulties in Emotion Regulation Scale; BSI = Brief Symptom Inventory; Psychot = Psychoticism; PSDI = Positive Symptom Distress Index; PSI = Personality Severity Index; CSI = Current Symptom Index.

* $p < .001$.