

Linguistic and Psychometric Validation of the Ukrainian Translation of the Inventory of Personality Organization-Revised (IPO-R-UKR)

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Abstract. The cultural adaptation of the psychodiagnostic questionnaire involves the implementation of a “double-blind” translation with subsequent linguistic validation considering both linguistic differences and the symbolism of the authors’ statements. Then, based on the survey data of respondents, various psychometric indicators of the questionnaire are checked. The development of Ukrainian-language questionnaires in the psychodynamic paradigm is crucial for creating an appropriate scientific evidence base of therapeutic methods and for psychotherapeutic practice to equip specialists with reliable diagnostic tools. The research objective is to carry out a professional translation of The Inventory of Personality Organization-Revised (IPO-R) into Ukrainian, followed by checking for linguistic validity and psychometric properties. The questionnaire showed high psychometric performance in the long (IPO; Lenzenweger et al., 2001) and short (IPO-R; Smits et al., 2009) versions and foreign language adaptations. It is widely used in psychological research, the theoretical and methodological basis of which is the psychoanalytic concept, in particular, the theory of Kernberg

(1986) on different levels of structural organization of personality, which underlies the psychoanalyst's choice of a strategy for working with a client. The created test version of the IPO-R-UKR questionnaire passed the stages of two-sided "double-blind" translation and was agreed upon by a team of philologists and psychologists. Based on the results of 1152 people participating in the empirical research, we have proven IPO-R-UKR to have a similar to the original two-factor structure, good internal consistency of the scales, construct convergent, and criterion validity. Thus, IPO-R-UKR can be used in practical psychological activities and scientific research to identify criteria for the structural organization of personality, such as reality testing, identity diffusion, and mechanisms of psychological defenses, as well as for screening diagnostics of the structural level of personality organization by Kernberg (1986).

Keywords: *linguistic validity, Ukrainian translation, structural personality organization, identity diffusion, reality testing, defense mechanisms, psychodynamic therapy.*

Семків Ірина, Турецька Христина, Кривенко Ірина, Кечур Роман. Лінгвістична та психометрична валідація україномовного перекладу «The Inventory of Personality Organization-Revised» (IPO-R-UKR).

Анотація. Культурна адаптація психодіагностичного опитувальника передбачає здійснення двостороннього "сліпого" перекладу із подальшою лінгвістичною валідацією, коли при перекладі враховуються як мовні відмінності, так і символізм авторських тверджень. Далі на основі даних опитування респондентів здійснюється перевірка різних психометричних показників отриманої мовної версії методики. Створення україномовних опитувальників у психодинамічній парадигмі є надважливим завданням для створення належної науково-доказової бази терапевтичних методів, що ґрунтуються на ній, так само як і для психотерапевтичної практики задля "озброєння" фахівців надійним діагностичним інструментарієм. Метою дослідження є здійснення фахового перекладу психологічного тесту «The Inventory of Personality Organization-Revised (IPO-R)» українською мовою, з подальшою перевіркою лінгвістичної валідності та психометричних показників тесту. Опитувальник продемонстрував високі психометричні показники у повній (IPO; Lenzenweger et al., 2001) та скороченій (IPO-R; Smits et al., 2009) версіях, а також в іншомовних адаптаціях. Він широко застосовується у психологічних дослідженнях, теоретико-методологічну основу яких складає психоаналітична концепція, зокрема, теорія О. Кернберга (Kernberg, 1986) про різні рівні структурної організації особистості, що лягає в основу вибору психоаналітиком стратегії роботи з клієнтом. Створений тестовий варіант опитувальника IPO-R-UKR пройшов етапи подвійного двостороннього "сліпого" перекладу та узгоджений групою філологів та психологів. Базуючись на результатах опитування 1152 учасників емпіричного дослідження, було доведено ідентичну оригінальній двофакторну структуру IPO-R-UKR, а також хорошу внутрішню узгодженість шкал, конструктну, конвергентну та критеріальну валідності. Отже, методику IPO-R-UKR можна використовувати у практичній психологічній діяльності, та наукових дослідженнях, спрямованих на виявлення критеріїв структурної організації особистості, як тестування реальності, дифузність ідентичності, механізми психологічного захисту, та для скринінгової діагностики рівня структури організації особистості за О.Кернбергом (1986).

Ключові слова: *лінгвістична валідність, україномовний переклад, структурна організація особистості, дифузність ідентичності, тестування реальності, механізми психологічного захисту, психодинамічна терапія.*

Introduction

The translation of psychodiagnostic tools is a complex task involving finding a linguistic equivalent of foreign words in the native language and accounting for latent meanings embedded in these words by the test authors. In the case of psychological

tools translation, it is crucial to find the correct equivalent for metaphors, idioms, and latent symbolic meanings in a native language (ITC, 2017). In addition, this procedure should be accompanied by verification of the questionnaire's validity and reliability, which determine its cultural adaptation. This procedure requires the involvement of experts in both philology and psychology. Thus, cultural adaptation of psychological tests comprises qualitative (linguistic validation) and quantitative methods (statistical validation) (ITC, 2017; Borsa et al., 2012). Several issues in the cultural validation of psychological instruments in the healthcare field should be solved: linguistic, procedural, and cultural (Chatzidamianos et al., 2021). The last issue refers to both cultural background and to the symbolic meaning of the words in different languages and the psychological tool's author style (Meier et al., 2021).

The article describes the linguistic and psychometric validation procedure of the Inventory of Personality Organization – Revised (IPO-R) (Smits et al., 2009), followed by cultural modification. Creating such a Ukrainian-language tool is an essential task for the development of psychodynamic practice in Ukraine and the investigation of the scientific bases of psychodynamic theory. Correct diagnosis is crucial for choosing the most effective psychotherapeutic interventions in a psychodynamic approach. The vector of modern psychodynamic analysts' activity is directed to the field of metric assessment of the personality organization, which gives a new problem representation, different from its former phenomenological perspective. Therefore, psychometric tools for measuring the personality's structural characteristics have a practical and scientific value.

One of the first models for assessing and diagnosing the personality organization with measurable indicators is the structural interview of Otto Kernberg. Based on Freud's structural theory of personality, Kernberg (1986) developed a method of structural analysis as an approach to psychoanalytic diagnostics. He introduced the criteria for determining the structural organization, a specific combination of which characterizes the three levels of personality organization – psychotic, borderline, and neurotic.

Reality testing is the primary criterion for distinguishing the psychotic level of a personality structural organization from the borderline and neurotic. It can be described through the ability to distinguish between self and non-self; between intrapsychic experiences and experiences originating from the outside world; the ability to evaluate one's emotions, behavior, and thoughts in terms of the social norms (Kernberg, 1986).

The degree of *personality integration* is another important criterion for distinguishing the levels of personality organization. Weak personality integration or the so-called identity diffusion is inherent in psychotic and borderline organizations, while the neurotic personality has a well-integrated identity. The integration of personality reflects the ability to form a holistic image of oneself, self-concept, and, secondly, a holistic view of other people (Kernberg, 1986).

The third criterion is the *maturity of the defense mechanisms*. Individuals with a psychotic organization have the least mature primary defenses based on splitting.

Alternatively, mature defenses based on repression are typical for the neurotic structural organization (Kernberg, 1986).

Although it provides some metrics, the structural interview is based on the trusting oral interaction of two people. This tool has been changed and modified several times. One of these modifications is the basis for the self-report questionnaire – The Inventory of Personality Organization (Lenzenweger et al., 2001). The 57-item questionnaire assesses the level of personality functioning according to the described criteria, having a three-factor structure verified in both clinical and non-clinical samples (Lenzenweger et al., 2001; Igarashi et al., 2009). It also has shown strong connections with the measures of other clinical scales: self-harmful, anxiety, depression, and aggression (Vermote et al., 2009); paranoid and antisocial personality disorders (Yun et al., 2013); tendencies to commit violence against a relationship partner (Maneta et al., 2013). Identity diffusion and primitive defenses are associated with low levels of self-control in borderline personality disorder patients (Hoermann et al., 2005); with alienation, aggression, absorption, and stress response (Lenzenweger et al., 2012); with a disorganized attachment style (Goodman, Bartlett, & Stroh, 2013). IPO has also been used to indicate the effectiveness in randomized controlled trials while treating personality disorders (Arntz, & Bernstein, 2006).

During the last years, several new investigations of the connectedness of the structural characteristics of personality and public and mental health issues appeared. They prove correlations between IPO scales and verbalization ability, reflective function (Górska, & Soroko, 2017), negative maternal behaviors (Ensink et al., 2017), depressive symptoms, rumination mediates (Kovács et al. 2021), traits of emotional intelligence, and early traumatic experience (Espinosa, & Rudenstine, 2018), psychological flexibility and attachment style (Salande, & Hawkins, 2017), and internalized relational patterns (Soroko, & Cierpiałkowska, 2018). The researchers studying how people cope with the COVID-19 pandemic and lock-down have found out that those who did not believe that the virus was life-threatening were more disposed to use maladaptive defense mechanisms than those who thought it was dangerous for life (Zajenkowska et al., 2021).

There is evidence that the researchers can effectively use IPO with adolescents (Biberdzic et al., 2017). Several IPO scales' specifications were recently designed (Dagnall et al., 2018, Hörz-Sagstetter et al., 2021).

However, a strong correlation between the factors of identity diffusion and primitive defense mechanisms ($r = .97$; Lenzenweger et al., 2001) brought an idea to check for the validity of IPO's two-factor structure (Normandin et al., 2002). After testing this model, a short 41-item version of the questionnaire, The Inventory of Personality Organization-Revised (IPO-R), was developed (Smits et al., 2009). The IPO-R includes 11 items on the Reality Testing (RT) and 30 items on the primitive defenses / identity diffusion (PD / ID). The authors claim these factors are independent, having a low correlation rate ($r = .62$; Smits et al., 2009, p.226), and internally consistent ($\alpha = .85$ for the RT and $\alpha = .90$ for the PD / ID; Smits et al., 2009, p.226), as well as highly correlated with the original IPO scales (.92 and .97,

respectively, for the RT and PD / ID scales), which indicates minimal information loss (Smits et al., 2009, p. 226).

The IPO and IPO-R have been translated and adapted into numerous languages: Japanese (Igarashi et al., 2009), French (Normandin et al., 2002), Dutch (Berghuis et al., 2009), German (Zimmermann et al., 2013), Portuguese (Oliveira, & Bandeira, 2011), Italian (Prete et al., 2015), which allows intercultural research in the theoretical and conceptual field of psychoanalysis. However, there is no Ukrainian translation and cultural adaptation for none of the described test versions for studying the structural organization. The creation of a translation and further validation of the IPO-R-UKR is a significant step towards implementing such research in domestic psychology.

The aim and objectives of the study. Taking the practical and scientific value of the IPO-R-UKR, and the lack of reliable and valid Ukrainian-language tools for diagnosing personality organization into consideration, the research aims to translate IPO-R into Ukrainian and to verify its psychometric indicators. Namely, the tasks are to create a high-quality Ukrainian-language version of the IPO-R-UKR; to check for its linguistic validity; on the results of empirical data analysis in a non-clinical sample to check for the internal consistency of the translated test, its construct convergent and criterion validity; to verify the two- and three-factor structure of the IPO-R-UKR and to choose an optimal solution for the Ukrainian-language version of the questionnaire key.

Methods

Procedure and Participants

The adaptation of the Ukrainian version of the “The Inventory of Personality Organization – Revised” had several stages. Firstly, the items were translated into Ukrainian, with subsequent expert evaluation and reverse translation, to ensure linguistic validity. Secondly, the empirical data were collected to assess the fundamental psychometric indicators of the Ukrainian-language test version – the internal consistency of the statements, structural, construct convergent, and criterion validity. Thirdly, based on the obtained results, the final version of the IPO-R-UKR and the questionnaire key were formed.

One thousand one hundred fifty-two people took part in the empirical study, 241 men (20.92%) and 664 women, 247 respondents did not indicate their sex, with an average age of 27.94 years (Min = 18, Max = 50, SD = 9.18). The age distribution was characterized by right-sided asymmetry (Med = 25; Shapiro-Wilk $W = .87770$; $p < .001$). The participants were recruited via social media and after signing an informed consent each of them was randomly allocated to fill-in one of the Google-forms including IPO-R, as well as one or more questionnaires (for details, see below). We did not collect any personal information about the participants so that their anonymity could not be broken.

Materials

The Ukrainian translation of IPO-R (Smits et al., 2009) that we have used, consists of 41 items to be assessed using a 5-point Likert scale (never = 0, rarely = 1, sometimes = 2, often = 3, always = 4). After checking for the questionnaire's factor structure (see below), the scores for the scales of reality testing (RT, 11 statements) and the defense mechanisms/identity diffusion were calculated in the range 0-100, according to their percentage values, due to the different number of the items in the scales.

We used the following measures to determine the construct convergent validity of IPO-R-UKR:

- The Bell's Object Relations & Reality Testing Inventory (BORRTI) (Bell, 1995) consists of 34 questions and contains 2 scales: "object relations" (24 items) and "reality testing" (10 items).
- The Personality Assessment Inventory – Borderline Scale (PAI-BOR) (Morey, 1991) contains 24 questions divided into the following scales: "affective instability," "identity problems," "negative attitudes," and "self-harm."

The links of IPO-R scales with the following questionnaires' scales were to assess criterion validity:

- Mentalization Questionnaire (MZQ) (Hausberg et al., 2012) contains 15 items which form four scales: "refusal of self-reflection," "emotional awareness," "mental equivalence mode," "affect regulation."
- The measure of Attachment Qualities (MAQ) (Carver, 1997) contains 14 questions and four scales – "safety," "avoidance," "ambivalent anxiety," and "ambivalent self-absorption." The questionnaire allows determining the leading type of attachment a person shows in social relationships in adulthood.
- The Hypersensitive Narcissism Scale (HSNS) (Hendin, & Cheek, 1997) diagnoses the level of vulnerable narcissism as a personality trait characterized by sensitivity to other people's views, avoiding behavior. The scale contains ten statements.

We have tested linguistic validity by the method of parallel double-blind translation, further expert evaluations of the text, and the method of reverse translation. Empirical data were processed in the STATISTICA 8.0 package. The methods of exploratory factor analysis – principal components analysis (EFA-PCA) verified structural validity, Cronbach's alpha method established reliability, and correlation analysis was to check for the construct convergent and criterion validity of the IPO-R-UKR.

Results

Linguistic Validity

While creating a test variant of the IPO-R-UKR, two professional philologists-translators have independently translated the original English version of IPO-R into

Ukrainian. A group of experts, professional psychologists, and Ukrainian philologists have compared these texts to evaluate each item to have the most reasonable interpretation. The next step provided reverse translations by two native English speakers with fluency in Ukrainian. We have compared these versions with the original IPO-R to eliminate free interpretations of the text (Eremenco, Cella, & Arnold, 2005; Rebrii & Demetska, 2020). As a result, a test version of the IPO-R-UKR was formed, which we believe saves the content of the original items and accounts for the linguistic tradition of the Ukrainian language.

The analysis of both translations showed no significant differences in the wordings for more than half of the items (No. 3-6, 11-15, 17-18, 20, 24-25, 28, 30, 33-38, 40-41). However, some statements required more careful analysis. The least problematic were the differences, which indicated the synonymy of the words used by translators rather than the interpretation inaccuracies, which could affect the content of the question (Carl & Schaeffer, 2017). For example, Item No. 2, “When *I'm nervous* or confused, it seems like things in the outside world don't make sense either,” one of the translators formulated this item in Ukrainian as “When I feel nervous...” (“коли я нервую”), while another translator used the phrase “When I am nervous” (“коли я знервований”), thus, focusing on a process and an emotional state respectively. Such differences do not significantly affect the understanding of the content of the question. However, Ukrainian philologists believe the wording “коли я нервую” (the process) is more reasonable than the one describing a state. We also met this wording in Google-search more often: “коли я нервую” shows about 5,900 uses, while “коли я знервований” is met only 185 times. We found a similar pattern in item No. 21 “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”. Translations of the word “book” into Ukrainian – “книга” or “книжка”, as well as “stories” – “історії” or “оповідання” were controversial, in both cases we preferred the first word for IPO-R-UKR test version.

Item No. 7, “I feel that my tastes and opinions are not really my own, but *have been borrowed from other people*,” also had differences in translation. Namely, one of the interpreters stated “...I inherit them from others” (“я їх переймаю від інших”), and the second formulated “...as if borrowed from others” (“наче запозичені від інших”).

For the final version of the questionnaire, based on similarities with the original, we chose the wording in the passive state “are borrowed from others” (“запозичені від інших”). According to the psychodynamic framework, this wording also has a more substantial diagnostic value for studying the maturity of the defense mechanisms. Knox (2011), analyzing William James’ distinction between the two aspects of the self, “I” and “Me”, empathizes that “Me-ness” symbolizes the passive state of mind, and “I-ness” is a symbol for maturity and developed self-agency. People using words symbolizing high levels of self-agency in personal narratives are more likely to have secondary and more mature defenses. A similar challenge in translation arose for item No. 23. Item No. 23: “*I pick up hobbies* and interests and

then drop them". Two versions of the translation offered either active or passive form: "I find new hobbies..." ("Я знаходжу хобі") and "The hobbies appear..." ("У мене з'являються хобі"). We preferred an active form, the same as used in the original ("Я знаходжу"), as more appropriate.

In item No. 8, "I feel that my wishes or thoughts *will come true as if by magic*," the last part of the statement had different versions of the translation, namely "...will be performed by a miracle as if by magic" ("збудуться дивом, так ніби це магія") and "...can be carried out in some magical way" ("можуть здійснитись якимось магичним чином"). To avoid tracing the linguistic construction from English, we chose a phrase which is more acceptable for Ukrainian, "здійснитись магичним чином". For item No. 10, "I am not sure whether a voice I have heard or something that I have seen is *my imagination or not*," the similar challenge appeared. The more typical for Ukrainian "is the fruit of my imagination" ("є плодом моєї уяви") appears in the test version.

We have solved similar translation problems in items No. 26, 27, 31, 32, and 39 in the same way, following the Ukrainian language tradition rather than the word-to-word translation.

Item No. 9, "People tell me I provoke or *mislead them* so as to get my way," includes a disputable wording which was translated as "mislead" ("ввожу в оману") and "deceive" ("обманюю") by two translators. Oppositely, in this case, we chose the first construction as both closer to the original and more common for Ukrainian. Item No. 16, "I can't tell whether certain physical sensations I'm having *are real, or whether I am imagining them*," had controversial translations with a different context: "...or it's my imagination" ("це моя уява") vs. "...I'm making them up" ("я їх вигадую").

In our choosing correct wording, we proceeded from the logic that it is not that important for the questionnaire to emphasize the cognitive process of imagination than on the fact that the sensations may be wrong. As a result, we worded the following statement: "Я не можу сказати, чи деякі з моїх фізичних відчуттів переживаються мною реально, чи я їх вигадую".

Item No. 19, "People tend to use me *unless I watch out for it*," was also disputable. The two translators' versions were "unless I'm not careful with them" ("якщо я їх не остерігаюся") vs. "unless I don't control" ("якщо я не контролюю").

None of the wording fully reveals the essence of the issue. The first translator's version linking "watch out for it" to the need of a person to be careful, to beware (similarly to "watch out for danger") looks more akin than an alternative one. However, the controversial phrase, we believe, refers more to the word "use," and not the people who do it (as in the translation using a pronoun "them"). Therefore, the statement in Ukrainian sounds like "Люди мають схильність використовувати мене, якщо я за цим не стежу".

We would also like to pay attention to the cultural specificity of several IPO-R items. Namely, the evaluation of the circumstances' predictability is essential here.

For instance, items No. 33, “My life goals change frequently from year to year,” or No. 18, “I act in ways that appear to others as unpredictable” (items No. 15 and 26 have the same ideas). Since the political and social situation in Ukraine is more unpredictable than in the USA or the EU, the measures of unpredictability and uncertainty avoidance can have a different value for the respondents.

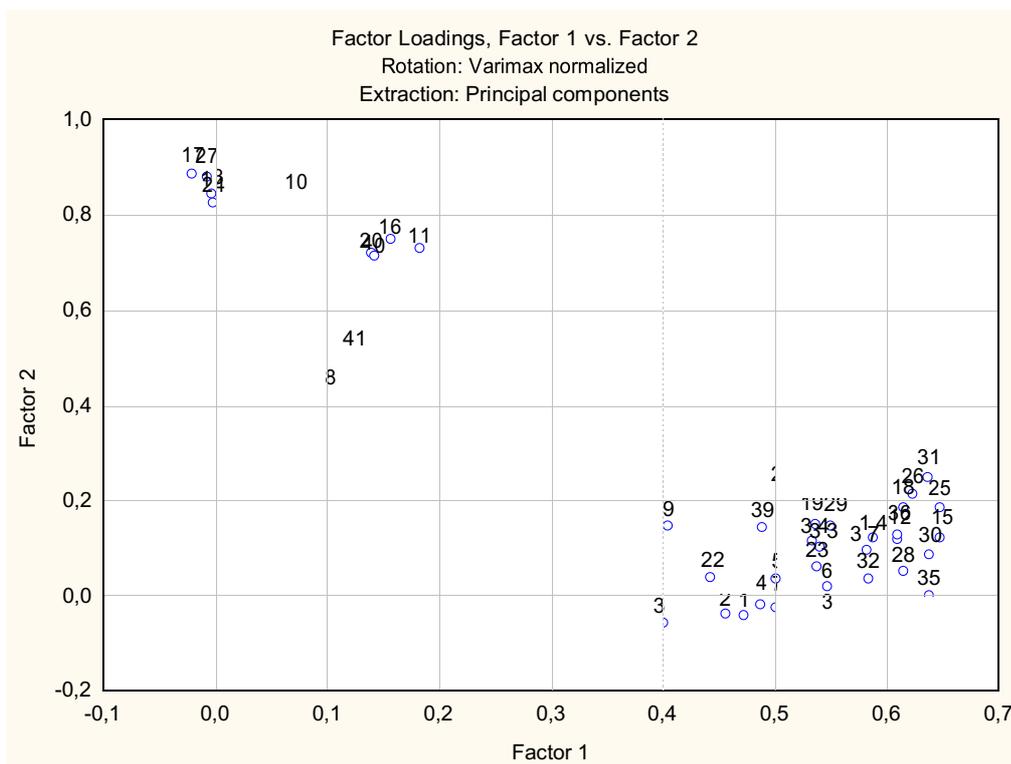
Structural Validity

Using the EFA-PCA, we have divided all items into two and three factors to determine the more valid structure of the IPO-R-UKR.

Two-factor model. Two selected factors describe 38.92% of the total variance; the correlation between factors is significantly lower than in the original version: $r = .26$ vs. $r = .62$ reported by Smits et al. (2009, p.226) that indicates the factors’ independence (Fig. 1).

Figure 1

The items’ location in the two-factor IPO-R-UKR structure



Smits et al. (2009) decided to exclude the statement from the scale in case of its loading $<.40$ and/or cross-loading $<.20$. There are no cross-loadings for any statement (see Fig. 1), and the lowest factor load for item No. 38 is $.399$. According to the factor loading (see Table 1), the Ukrainian version completely replicates the original questionnaire’s structure: factor 1 (PD / ID) includes 30 items, No. 1-7, 9, 12, 14-15, 18-19, 21-23, 25-26, 28-39, and factor 2 (RT) consists of 11 statements, No. 8, 10-11, 13, 16-17, 20, 24, 27, 40-41. Thus, the two-factor model of IPO-R-UKR is valid.

Table 1
Factor loadings of the IPO-R-UKR items (EFA-PCA results)

Item No.	Factor 1 – PD / ID	Factor 2 – RT	Item No.	Factor 1 – PD / ID	Factor 2 – RT
1	.472	-.041	22	.442	.041
2	.455	-.038	23	.537	.620
3	.546	-.044	24	-.002	.826
4	.486	-.018	25	.647	.186
5	.501	.0368	26	.622	.214
6	.546	.020	27	-.008	.880
7	.500	-.024	28	.614	.051
8	.103	.423	29	.550	.148
9	.403	.147	30	.638	.086
10	.072	.834	31	.637	.248
11	.183	.731	32	.583	.037
12	.609	.120	33	.540	.102
13	-.003	.844	34	.533	.117
14	.587	.123	35	.637	.001
15	.647	.120	36	.609	.128
16	.156	.750	37	.582	.098
17	-.021	.884	38	.399	-.056
18	.614	.185	39	.488	.145
19	.536	.151	40	.141	.714
20	.139	.720	41	.124	.505
21	.506	.220			

Note. The highest factor loading is marked bold

The three-factor model describes 43.04% of the total variance. Correlation coefficient between the factors 1 and 2 is $r = .22$, 1 and 3 $r = .71$, 2 and 3 $r = .27$. According to the content of the items, factor 1 corresponds to the characteristics of diffuse identity (ID scale of IPO). Factor 2 consists of items related to reality testing (RT scale), and factor 3 to primitive defenses (PD scale). Despite the significant strengthening of the links between the factors in the three-factor model, these correlations are still lower than those found for the original IPO (scales ID and RT $r = .67$, PD and ID $r = .97$, PD and RT $r = .71$) (Lenzenweger et al., 2001, p. 581)).

Factor loadings in the three-factor model of the IPO-R-UKR are less unambiguous than in the similar two-factor model. Part of the items have cross-loading in the range of .20 and less (No. 6, 12, 19, 21, 25, 28, 29, 31, 34), and for some of them (No. 6, 21), the factor loadings do not reach .40 in any factor.

Internal Consistency

While testing for reliability, we calculated the alpha Cronbach's coefficients for the IPO-R-UKR scales. The results show $\alpha = .92$ for both scales, inter-item correlation r

= .29 for the PD / ID and $r = .53$ for the RT scale. The internal consistency score for the integral scale including 41 item is also $\alpha = .92$, $r = .24$.

Construct Convergent Validity

To determine whether IPO-R-UKR is suitable for establishing the traits allowing to distinguish personality organization, we have checked for correlations of its measures with the questionnaires measuring relevant characteristics. According to the validation procedure, the primary hypotheses were about the direct positive correlations 1) of the reality testing scale (and its subscales) in BORRTI and the IPO-R-UKR's reality testing scale (RT), 2) of the identity problems' subscale, and the integrated PAI-BOR scale of borderline traits with the primitive defenses/identity diffusion scale (PD/ID). We used non-parametric Spearman's rank correlation criterion to test these assumptions as the analysis of the IPO-R-UKR scales' frequencies indicated there are no normal distributions for both scales ($N = 1152$).

All hypotheses were confirmed, proving the IPO-R-UKR's convergent validity. There are strong ($p < .001$) links between the RT scale and the BORRTI's reality testing scale. The PD/ID scale shows even stronger correlations with the integrated scale of borderline features of the PAI-BOR test (see Table 2 for correlations of the integrated scales).

Table 2

Connections between the IPO-R-UKR and BORRTI and PAI-BOR scales: confirmation of construct convergent validity

Questionnaire, number of participants	Scale	Link with IPO- R-UKR, RT, r	Link with IPO-R-UKR, PD / ID, r
BORRTI, 147	Reality testing	.40***	.60***
	Object relationships	.41***	.64***
PAI-BOR, 488	Borderline traits	.41***	.72***

*** $p < .001$.

Criterion Validity

Several constructs determining the differential diagnosis of personality organization were used as external criteria for assessing the validity of the IPO-R-UKR. According to the psychodynamic perspective, these are: the level of mentalization (measured by MZQ), the attachment quality (MAQ), and the level of vulnerable narcissism (HSNS). To confirm the criterion validity of the IPO-R-UKR, we expected its both

scales would be directly correlated to the maladaptive dimension of each of these personality traits.

The close links between the IPO-R-UKR scales and these features (Table 3) give grounds to assert its ability to distinguish the characteristics inherent in individuals within and outside the neurotic spectrum. Namely, the PD/ID scale positively correlates with low ability to mentalize ($r = .55$), the tendency to form unfavorable interdependence in relationships (mainly dysfunctional, $r = .35$, while the relation with a healthy interdependence of this scale is negative, $r = -.34$), and the maladaptive types of attachment (avoidant, $r = .26$, ambivalent anxious, $r = .33$, and ambivalent self-absorbing, $r = .44$), high hypersensitive narcissism ($r = .44$).

Table 3

Connections between the IPO-R-UKR scales and other psychodynamic constructs' questionnaires: confirmation of criterion validity

Questionnaire, number of participants	Scale	Link with IPO-R- UKR, RT, r	Link with IPO-R- UKR, PD / ID, r
MZQ, 190	Mentalization	.27***	.55***
MAQ, 144	Secure attachment	.10	.06
	Avoidant attachment	.16*	.26***
	Ambivalent attachment	anxious .18*	.33***
	Ambivalent attachment	self-absorbing .23**	.44***
HSNS, 284	Vulnerable narcissism	.26***	.44***

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

Discussion

The Ukrainian translation of the Inventory of Personality Organization-Revised has a high level of validity and reliability, allowing using this method in research and practical psychotherapeutic activities within the Ukrainian-speaking cultural environment. Nevertheless, we will emphasize the critical aspects of the questionnaire's linguistic analysis and cultural adaptation in the research process.

Firstly, the difficulties at the stage of IPO-R-UKR linguistic analysis appeared due to the peculiarities of the psychodiagnostic tools construction and the semantics of some wordings. Namely, the specifics of the active or passive forms' usage in the

context of reality testing, identity diffusion, and defense mechanisms maturity were important to preserve the diagnostic value of the items. According to the psychodynamic theory of personality, subjectiveness and the feeling of influencing the environment or life events personally are particularly important in distinguishing the neurotic level of structural organization from borderline and psychotic (Knox, 2011; Khomyk, & Filippova, 2014). Such a subjective sense of influence can be expressed using different wordings: people with higher subjectiveness are more likely to operate with active forms (“I do”), compared to those with lower who used passive voice (“it happened”). Therefore, during the translation process, it was crucial to pay attention to whether the change of the passive to the active form or vice versa neither changes the item’s semantics nor affects the diagnostic power of each statement. When translating, we tried to preserve the items’ style close to the original and select Ukrainian language constructions to be easily understood by the participants. It was also essential to adequately translate the phraseologies avoiding linguistic tracing but saving the latent meaning of the item.

Secondly, it is important to stress that verifying the IPO-R-UKR validity and reliability required an understanding of the sample context. On the one hand, reality testing and primitive defenses/identity diffusion scales have significant correlations with related tools. There is a general reason to believe that the IPO-R-UKR is a valid questionnaire for diagnostic screening of borderline states. On the other hand, the primitive defenses/identity diffusion scale is more sensitive to measuring personality aspects outside the neurotic spectrum than the reality testing scale. We make this deduction due to higher correlation coefficients between PD/ID and convergent scales and more expressive right-sided asymmetry of RT in all samples (which means that a significant number of respondents gave answers in low values). A distinct violation of reality testing occurs only in individuals with a psychotic personality structure (Kernberg, 1986), which may decrease the diagnostic power of this scale in the study of individuals with borderline and neurotic personality structures.

Although the correlations of the RT scale are somewhat weaker than the PD/ID, they still allow us to trace some trends that are essential for psychodynamic diagnostics. People having low reality testing also have lower levels of mentalization, insecure types of attachment, and higher levels of maladaptive narcissism, which generally corresponds with other studies (Goodman, Bartlett, & Stroh, 2013; Maneta et al., 2013; Hoermann et al., 2005) and testifies to the criterion validity of the IPO-R-UKR.

Thirdly, concerning the controversy over the two- or three-factor structure of the IPO-R-UKR, we consider the two-factor model to be better. Such a structure is entirely consistent with the original and devoid of cross-loadings, while the three-factor model does not give grounds to attribute some items to a specific scale unambiguously. In this case, disputable statements had to be excluded from a questionnaire so that a 37-item IPO-R would appear. However, this adaptation applies to the already abbreviated test version, so it would not be appropriate to make such an exclusion due to a possible uncontrollable data loss. Instead, we consider that the two-component structure of the Ukrainian-language version of the IPO-R has

higher structural validity. Thus, we recommend running data analysis within two scales – reality testing (RT) and primitive defenses/identity diffusion (PD/ID).

Finally, it should be noted that the internal consistency of the IPO-R-UKR items is even higher than the original's, which demonstrates the high reliability of this psychodiagnostic tool. Based on the obtained results, we can also say that all questionnaire items measure the same property of the studied phenomenon. Therefore, even the integrated IPO-R-UKR scale can be used in the research as it has the high internal consistency.

Conclusions

The availability of the Ukrainian version of the Inventory of Personality Organization-Revised is an important investment in creating the psychodynamic scientific evidence base and developing psychodynamic psychodiagnostics for the needs of psychotherapeutic practice.

The current study of the linguistic analysis and cultural adaptation of the IPO-R-UKR shows this psychodiagnostic tool's high linguistic validity, internal consistency, factor structure complete reproducibility, high construct convergent, and criterion validity.

Regarding the limitations of the study, which, at the same time, indicate the prospects for further research, we note the following: the uneven distribution of respondents by age (average age is almost 28 years old), gender (only 20,9% are men), other socio-demographic indicators that were not taken into account; the lack of clinical sampling, which can be compensated in further studies to clarify the diagnostic power of the reality testing scale; no retest has been performed, so the questionnaire needs to be tested for temporal reliability.

Nevertheless, these limitations do not diminish the theoretical outcome and practical value of the study. The data presented in the article are original and important and give grounds to recommend IPO-R-UKR to be used in practice for screening determination of the personality organization and its key criteria (reality testing, identity diffusion, defense mechanisms) and to solve scientific tasks within the psychodynamic approach.

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