

## ORIGINAL RESEARCH

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UDC: 616.89-008**Translation and validation of the Russian version of the personality inventory for DSM-5 (PID-5)**

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**Abstract**

**Background:** The 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) has included major and radical changes in the personality disorder (PD) diagnosis method, from categorical to dimensional one. It includes Alternative Model for Personality Disorders (AMPD). This model explains that personality disorders are characterized by impairment in personality functioning and presence of pathological personality traits. The current study consists in the validation and cultural adaptation of the Russian version of the Personality Inventory for DSM-5 (PID-5), respecting the stages of intercultural adaptation specific to the medical, sociological and psychological fields.

**Material and methods:** The PID-5 questionnaire translated into Russian was used by 30 Russian-speaking subjects living in the Republic of Moldova that use English in the specialized activity. After a 30 minute break, all of these subjects were asked to fill out the original questionnaire in English.

**Results:** After comparing the answers to the 220 items, we obtained the following results: 26 persons, representing 86.7% of the total number of participants, responded identically to all 220 items, one person (3.3%) admitted only one difference in test responses, 3 persons (10.0%) admitted a different response in 3-4 items.

**Conclusions:** The result of the presented work is the Russian-language version of the PID-5 questionnaire, which proposes a methodical evaluation of the Russian speaking people with a mental health problem, the residents of the Republic of Moldova.

**Key words:** DSM-5, Alternative Model DSM-5 for Personality Disorders, PID-5, Russian version of PID-5.

**Introduction**

The Diagnostic and Statistical Manual of Mental Disorders (DSM) was published by the American Psychiatric Association (APA) to help the psychologist and psychiatrist in diagnosing people with mental health problems. The 5th edition of the DSM (DSM-5) is the latest version of this manual, and has included major and radical changes in the personality disorder (PD) diagnosis method, from categorical to dimensional one. The traditional categorical paradigm of PD described in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 2000) or in the tenth edition of the International Classification of Diseases (ICD-10) have been thoroughly criticized both conceptually and psychometrically [1,2].

In the context of the DSM-5 research plan, experts from the American Psychiatric Association (APA) and the National Institute of Mental Health (NIMH) have set up working groups for research planning and drafting recommendations for future DSM editions. The Gaps Work Group analyzed 18 alternative proposals for a dimensional classification of Personality Disorder (PD). The conclusion was

that most of these proposals have a common hierarchical structure with 4 to 5 top-level domains and 15 to 30 lower-level dimensions [3]. The authors argue that both normal personality and pathological personality could be integrated into a hierarchical model with two higher-order domains of internalizing and externalizing behaviors which corresponds to the general psychopathology model [4,5]. Finally, several authors analyzed the hierarchical structure of the traits using the method proposed by Goldberg, which is based on the estimation of a series of models of factors from a smaller number to an increasing number of factors [5], and the cross-model correlation is then used to estimate relationships between hierarchy levels. At the level of the two factors, Internalization and Externalization were expressed. At the level of the three factors, the Externalization behavior replicated while the Internalization behavior split into Detachment and Negative Affectivity. The fourth level was characterized by dividing the Externalization behavior into Disinhibition and Antagonism. Finally, at the fifth level, Detachment split into Detachment and Psychoticism [3,6,7,8].

Thus, the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders includes this DSM-5 Alter-

native Model for Personality Disorder (AMPD) in Section III (Emerging Measures and Models) of DSM-5 [9]. This model explains that personality disorders are characterized by impairment in personality functioning and presence of pathological personality traits. This approach can also diagnose features specific for a personality disorder, which can be done when the personality disorder appears to be present but does not meet all of the above-mentioned criteria for personality disorder. All of these changes in the AMPD are still being evaluated by experts, and the model is called a dimensional-categorical hybrid model of personality disorders [10]. The dimensional approach could not fully replace the categorical approach, but an integration of them was attempted. The categorical approach of personality disorders determines the clinician to decide whether the disorder is present or absent. On the other hand, the dimensional approach allows the clinician to examine the severity of the disorder, and not to focus only on the threshold that indicates the presence of the disorder. Therefore, the dimensional approach can help the clinician to explain the disorders in a more comprehensive way.

This model, published in Section III (Emerging Measures and Models) DSM-5, includes a tool of dimensional assessment for maladaptive personality traits – Personality Inventory for DSM-5 (PID-5) [11].

The personality taxonomy in DSM-5 involves five high-order domains that are specified by the twenty-five lower-order facets described in DSM-5 [12,13]. These five areas are Negative Affectivity (frequent and intense experiences of negative emotions that manifest themselves in either behavioral or interpersonal relationships), Detachment (the tendency to avoid socio-emotional experience, including withdrawal from interpersonal interactions and restriction of experience and affective expression), Antagonism (behaviors that put the individual in disagreement with others), Disinhibition (tendency towards immediate satisfaction), and Psychoticism (presenting a wide range of strange, eccentric or unusual cultural behaviors and cognitions).

Review by Al-Dajani et al., published in 2016, confirms that many studies use this questionnaire, namely over 30 papers in 3 years after the publication of DSM-5 [9]. The psychometric properties of PID-5 have been illustrated in a series of studies associating the model of personality traits in DSM-5 with other well-known instruments in clinical practice, such as general characteristics of personality [14,15,16], alternative conceptions of maladaptive personality traits [17], pathological beliefs [18] and psychopathy [19,20].

Because the Krueger's study from 2012 was made on a sample of respondents with therapeutic interventions and psychiatric patients, several authors published evidence of PID-5 factor structure in both students and the general population [7,13,14]. It can be assumed that the distribution of PID-5 personality traits is different for patients and the general population in the prevalence, form and severity of psychopathology of personality [21].

It is very important that the hierarchical structure of the PID-5 inventory, which measures the pathology of the personality based on the Big Five, has been preserved in the translations into Indonesian, Italian, German, Danish, French, Czech, Spanish, Brazilian and Portuguese [6,10,20,22, 23,24,25,26,27,28]. Moreover, an approximately identical structure was found in a 100-item version and a short version of 25 items of Danish PID-5 [6]. Such international studies are important as it universalizes and generalizes the model of pathological personality traits.

As one of the attempts to develop the dimensional approach of personality disorder included in DSM-5 in the Republic of Moldova, the adaptation and validation of PID-5 in the Romanian version was carried out (article in printing). Since it is an important clinical tool that helps physicians to diagnose patients with personality disorder, it can be deduced that further testing of the validity of this tool is also required for Russian-speaking residents of the Republic of Moldova. Moreover, the widespread availability of this medical questionnaire in both languages would stimulate clinicians to use it.

The most recently postulated test of validity in psychometry was proposed by Messick [29]. It has been argued that all components of the validity methods can be explained by the validity of the construct. Validity is an evolving property of an instrument and validation is a dynamic process in progress [29,30,31]. It is therefore important for physicians to always ensure that the tools they have used are valid enough, since the interpretation of the tests will be based on the obtained scores and the diagnosis based on these interpretations has a direct impact on people's lives.

## Material and methods

The current study consists in the validation and cultural adaptation of the Russian version of PID-5, respecting the stages of intercultural adaptation specific to the medical, sociological and psychological fields. The research methodology is presented in the next section [29,32,33].

### Stage I: Initial translation

The first step in adaptation is translation in the perspective.

Two bilingual translators, whose mother tongue is the target language (Russian), produced the two independent translations. Translators have been professional, certified translators, as well as specialists with experience in mental health care and treatment (psychologist with training in assessment and psychodiagnosis and psychiatrist, both with psychotherapy training). Each one produced a written report that included some comments and suggestions. Additional comments were needed to highlight provocative phrases or uncertainties. Their conclusions were also summarized in a written report. The content element, answering options and instructions have all been translated in this way.

### Stage II. Synthesis of translations

The translation of the questionnaire from source language into the target language was done, taking into account

the criterion of the degree of conceptual overlap between the source culture and the target culture. Conceptual overlap is given by the extent to which a concept has the same meaning in both languages [29,32,34]. The two translators, included in a Discussion Group, synthesized the translation results. Respecting the original protocol, a discussion group consisted of the two translators, plus other mental health specialists (neurologist, clinical psychologist, physiologist) with experience in translating from English. The two versions were confronted, and the differences were discussed in the group, so the first Russian version was completed.

The issues on which the discussions focused were related to both the content and the applicability of the contents of the items in the Russian socio-cultural context, as well as the language formulas [29, 32].

### Stage III. Performing the retroversion

Retroversion is a process to assess validation that highlights gross expressions or conceptual errors in translation, necessary to ensure that the translated version reflects the same content element as the original version. This step often excludes unclear wording in translations. Retroversion was carried out by two authorized professional translators who translated the combined version (stage II) back to English, and then the authors checked whether there were differences of interpretation and discrepancies between the two variants. Subsequent changes were made with the agreement of both parties. Comparison of the retroversion with the original version led to a second revision of the material and the list of problematic items. However, the similarity between the retroversion and the original version does not guarantee a satisfactory translation; it simply provides a consistent translation [32]. Retroversion is only a type of assessment of validation by increasing the probability of "highlighting the imperfections" [33].

## Results

### Stage IV. Validity testing

To determine the fidelity indicators of the questionnaire, the internal consistency of the inventory was analyzed. We have calculated the internal coefficient Cronbach's alpha, which measures the extent to which the indices that make up a scale are intercorrelated. For a proper correlation of indices, a value of at least 0.7 of C-alpha (5) is required. Table 1 shows the results of internal consistency for the Russian version of PID-5. Following these results, namely – 0.931 in men and 0.928 in women – we can conclude that the scale is true. Cronbach's alpha is dependent on the number of inventory items, and in this case we have a very high coefficient.

Table 1

### Cronbach's alpha for PID-5

	Cronbach's alpha	Nr. of items
Men	0.931	220
Women	0.928	

**Subjects.** The development of the study implied the application of the PID-5 questionnaire translated into Russian to a number of 30 Russian-speaking subjects (tab. 2) living in the Republic of Moldova, that use English in the specialized activity (clinical context – interviewing the patient, training programs in English), as well as in creating and editing materials in English (research papers, financing projects). After a 30 minute break, all of these subjects were asked to fill out the original questionnaire in English.

Table 2

### Demographic data of the participants

	Age, years			
	Nr.	Min	Max	Mean ± SD
Women	21	28	57	22.61±0.55
Men	9	32	51	22.34±0.92

After comparing the answers to the 220 items, we obtained the following results: 26 persons, representing 86.7% of the total number of participants, responded identically to all 220 items, one person (3.3%) admitted only one difference in test responses, 3 persons (10.0%) admitted a different response in 3-4 items. In the next step, each item which had different answer in the test /repeated test was analyzed separately and difference (in points) was calculated.

## Conclusions

The procedure described in this article included translation, retroversion, validation and the cultural adaptation of the Russian-language version of the PID-5 questionnaire. The result of the presented work is the Russian-language version of the PID-5 questionnaire, which proposes a methodical evaluation of the Russian speaking people with a mental health problem, the residents of the Republic of Moldova.

Performing translation, with the assurance of conceptual overlap, is the phase which precedes the stability test which is calculation of Cronbach' alpha of internal consistency (inter-items correlation). The obtained results demonstrate that this translation provides sufficient consistency and validity to be used in future studies, also it makes possible to reliably use the translated tool to evaluate the individual differences and personality traits. The results also impose to continue studies in more representative groups, focusing on the clinical cases where personality disorders prevail.

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