

Study of translation and reliability of the Wisconsin personality disorders inventory (WISPI-IV)

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Estudio de traducción y fiabilidad del Inventario de trastornos de la personalidad de Wisconsin (WISPI-IV)

Summary

Introduction. *The Wisconsin personality disorders inventory (WISPI-IV) is a self report instrument for the assessment of DSM-IV personality disorders. The aim of this study was to translate the WISPI-IV into Spanish and report its internal consistency and temporal stability.*

Methods. *The Spanish version was obtained by translation and back translation method, using two independent translators. Then 270 subjects of both genders, between 18 and 65 years of age, who knew how to read and write and accepted to participate voluntarily were selected and answered the instrument. A subgroup of 20 subjects completed the instrument for the second time, at fifteen days of the first application. The analysis of internal consistency and coefficients of temporal stability were calculated with Cronbach's alpha coefficients and Pearson's correlation, respectively.*

Results. *All Spanish version WISPI-IV scales mean scores and internal consistency coefficients were similar to their original counterparts (alphas = 0.64-0.86). Except for avoidant personality disorder scale, test-retest coefficients were also moderate to high and statistically significant ($r = 0.46-0.92$).*

Conclusions. *The Spanish version of the WISPI-IV behaved similarly with the English version, and demonstrated adequate internal consistency and temporal stability coefficients to evaluate the presence of personality disorders.*

Key words: Personality. Personality disorders. Measure. Evaluation. WISPI-IV.

Resumen

Introducción. *El objetivo del presente estudio fue traducir al español y determinar la fiabilidad del inventario de trastornos de la personalidad de Wisconsin (WISPI-IV), un instrumento de autoaplicación que evalúa la presencia de trastornos de personalidad de acuerdo al DSM-IV.*

Métodos. *En primer lugar se llevó a cabo la traducción al español y retraducción al inglés por parte de dos traductores independientes para obtener la versión en español del WISPI-IV. Posteriormente se solicitó a 270 sujetos de ambos sexos, entre 18 y 65 años de edad, que sabían leer y escribir y aceptaron participar de manera voluntaria, que contestaran el instrumento. Un subgrupo de 20 sujetos lo completaron por segunda vez a los 15 días de la primera aplicación. El análisis de consistencia interna y los coeficientes de estabilidad temporal se calcularon con base en el alfa de Cronbach y correlaciones de Pearson, respectivamente.*

Resultados. *Las puntuaciones promedio y los coeficientes alfa de Cronbach de todas las subescalas del instrumento fueron similares a las reportados para la versión original en inglés. Los coeficientes de consistencia interna de la mayoría de las subescalas fueron de moderados a altos (alfa = 0,64-0,86). A excepción de la subescala de trastorno evitativo de la personalidad, los índices de correlación prueba-reprueba resultaron de moderados a altos y estadísticamente significativos ($r = 0,46-0,92$).*

Conclusiones. *La versión en español del WISPI-IV mostró consistencia interna y estabilidad temporal para evaluar la presencia de trastornos de la personalidad.*

Palabras clave: Personalidad. Trastornos de la personalidad. Escalas. Evaluación WISPI-IV.

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INTRODUCTION

Personality disorders can be defined as constellations of permanent patterns to perceive, relate and think about the environment and ones self that cause either notable deterioration in social or occupational functioning or significant subjective uneasiness¹.

At present, modern classification systems^{1,2} include different categories of personality disorders according to the presentation pattern of some specific traits. How-

ever, even when better classification systems are available, adequate diagnostic agreement is not reached. Reliability between expert evaluators for the diagnosis of personality disorders is poor³ and improves at levels between 0.6 and 0.8 with the use of semi-structured psychiatric interviews⁴. The following are found among the main semi-structured interviews to diagnose personality: a) personality disorder exam (PDE)⁵; b) structural clinical interview for axis II of DSM-III-R personality disorders (SCID-II)⁶; c) structured interview for personality disorders of the DSM-III-R (SDIP)⁷, and d) international personality disorder examination (IPDE) developed by the WHO⁸. These semi-structured interviews are, definitively, the best strategies to assess specific cases. Nevertheless, they have the disadvantage that their use requires much application time and specific training. This type of instrument is generally rated as having restricted utility and as being very expensive to use to perform studies in large populations^{9,10}.

The fundamental objective of developing self-administered instruments in psychiatry is to be able to examine the problems rapidly, safely and with possibilities of covering large populations at low cost. The development and use of self-administered instruments to assess personality has a long tradition in the field of clinical psychology. Such is the case of the Minnesota multiphasic personality inventory (MMPI)¹¹, Eysenck personality questionnaire¹² or Million personality inventory¹³. However, these instruments, that have generated very valuable information regarding the study of the personality, are not compatible with the diagnostic criteria of the personality disorders of the world psychiatric classifications.

Years ago, there was only one self-administered questionnaire compatible with the world psychiatric classification systems: the revised personality diagnostic questionnaire (PDQ-R)⁵, which, in its Spanish version, showed limited validity for the diagnosis of personality disorders¹⁴.

In this state of things, in regards to the question of the diagnosis of personality disorders, the Wisconsin personality disorders inventory (WISPI-IV)¹⁵ arises as a new option to diagnosis personality disorders in a practical way and with low operational costs, according to the DSM IV criteria.

This instrument was developed based on an interpersonal model of the personality: the structural analysis of social behavior (SASB)¹⁶⁻¹⁸.

Structural analysis of social behavior

The structural analysis of social behavior (SASB) is a psychosocial model of personality that characterizes interpersonal behavior, distinguishing three domains: a) *interest dimension: on others, on the self, outside the self*; b) *affinity dimension: attack vs kindness*, and c) *interdependence dimension: control vs autonomy*¹⁹.

Recently, Benjamin^{18,20} has developed formulations and descriptions on each personality disorder category

from this point of view. These formulations consider the interpersonal context in which behaviors associated with each personality disorder are structured and developed.

According to Benjamin^{16,17}, constructs coming from the SASB are validated, are reliable, internally consistent and capable of discriminating between clinical groups and normal population.

Wisconsin personality disorders inventory

The WISPI-IV is a 214 item self-administered questionnaire that provides dimensional and categorical scores of 10 personality disorders in agreement with DSM-IV axis II and of passive aggressive personality (negativist) according to the DSM-IV appendix B. It also includes 10 items from the Marlowe-Crowne *social desirability* scale²¹. Each item is assessed on a scale of 10 points, where 1 is «never» and 10 is «always». The subjects respond to each item according to how much or with what frequency it has functioned in different aspects of their life, during the last 5 years or more. It is well to state that the items explain the point of views of the subjects themselves more than of observations of other external persons. The scores produced are converted into a 10 point scale for each personality disorder, which makes it possible to compare the scores obtained in each specific case. Furthermore, z scores (standardized) can be calculated to made comparisons between normative sample profiles.

There is extensive evidence on the validity and reliability of the original version of the WISPI-IV in English. When several clinicians classified all the items of the instrument into 11 categories of the DSM-III-R axis II, the average *kappa* coefficients were agreed on based on previously assigned levels²². When it was attempted to find out if there was any correspondence between two interpersonal categories of each item, the authors established correlations of .68 as an average (range: 0.43-0.97). On investigating if there was any relationship between an interpersonal category of each item and a category associated with some personality disorder, a 0.69 correspondence was found (in a spectrum of 0.41-0.93). When concordance was searched for among the dimensional scores of the WISPI-IV and some other personality disorder scales, moderate and positive indexes were found, these being 0.64 with the SCID-II and 0.52 with the PDE²².

Finally, it has also been reported that the WISPI-IV is characterized by high internal consistency, with Cronbach's alphas between 0.84 and 0.96 (15), between 0.86 and 0.97 and between 0.81 and 0.94 (22). The test-retest reliability coefficients or temporal stability were found in ranges going from 0.71 to 0.96 between measurements with time intervals from 1 to 46 days (15).

As can be observed, the WISPI-IV is a promising instrument that represents both a dimensional approach as well as a quantitative one as it treats diagnostic criteria of the personality disorders according to the DSM-IV in a valid and reliable way. In this sense, the objective of

the present study was to translate the WISPI-IV into Spanish and to determine its reliability.

METHODS

Subjects

The total sample of the study was made up of subjects from the general population, of both genders, between 18 and 65 years of age, who knew how to read and write, and who voluntarily accepted to participate.

Procedure

First, it was translated to Spanish with a back translation to English by two independent translators experts in both languages, to obtain a final version in Spanish of the WISPI-IV. After, an intern in the Psychology career asked the participants who were in schools and public and commercial centers and who fulfilled the study inclusion criteria, to answer the Spanish version of the WISPI-IV and an *ad hoc* form to assess sociodemographic variables. A subgroup of 20 subjects were requested to complete the instrument for the second time at fifteen days of the first application, to assess temporal stability. Finally, the data in the SPSS-X, version 10.0 for PC were dumped and analyzed.

Statistical Analysis

In the first place, description of the sample was performed based on mean and standard deviation (SD) for continuous variables and percentages for the categorical ones. After, analysis of the internal consistency of the instrument was performed using Cronbach's alpha calculation and Pearson's correlations between initial average scores and at two weeks, of all the sub-scales of the instrument, in order to determine the test-retest correlation coefficients, as measures of the temporal stability of the instrument.

RESULTS

The sample was made up of a total of 270 subjects, 181 (33%) of which were women and 89 (67%) men, with a mean age of 25.76 ± 8.75 years (range: 18-60 years), and average schooling of 14.67 ± 2.63 years of study. **Table 1** presents the sociodemographic characteristics of the sample.

Reliability of the WISPI-IV

Internal consistency

Table 2 shows the average z scores obtained by the total sample in the different sub-scales and Cronbach's alpha coefficient, both from the Spanish version of the WISPI-IV subjected to study as well as in the original version in English¹⁵, in order to facilitate its comparison.

TABLE 1. Demographic characteristics of the Spanish WISPI-IV sample (n = 270)

Variables	Descriptive measure (number of cases and percentage or mean and SD)
Gender	
Female	181 (33%)
Male	89 (67%)
Civil status	
Single	210 (77.8%)
Occupation	
Home	13 (4.8%)
Student	113 (41.9%)
Profession	50 (18.5%)
Other	94 (34.8%)
Age	25.76 ± 8.75
Schooling	14.76 ± 2.63

Temporal stabilit

Table 3 presents the gross scores for each one of the sub-scales of the Spanish version of the WISPI-IV as well as their correlation between the first and second application of the test.

CONCLUSIONS

From the psychometric point of view, the Spanish version of the WISPI-IV behaved similarly to that reported for the original version¹⁵. As can be seen, the average scores and standard deviations of the different sub-scales as well as the internal consistence and temporal stability

TABLE 2. Average scores and internal consistency coefficients of the WISPI-IV subscales: comparison between original and Spanish version

Subscale	No. of items	Mean and SD		Alpha	
		Original version 1993	Version in Spanish 2002	Original version 1993	Version in Spanish 2002
Paranoid	15	3.21 ± 1.27	3.71 ± 1.53	0.937	0.825
Schizoid	15	2.87 ± 1.10	3.17 ± 1.16	0.847	0.642
Schizotypal	18	2.33 ± 1.11	2.58 ± 1.27	0.923	0.842
Histrionic	18	3.03 ± 1.08	3.32 ± 1.53	0.876	0.846
Narcissistic	19	3.10 ± 1.19	3.52 ± 1.43	0.906	0.861
Antisocial	27	1.84 ± 0.84	2.09 ± 1.02	0.908	0.863
Borderline	18	2.98 ± 1.29	2.86 ± 1.18	0.884	0.797
Avoidant	19	3.68 ± 1.75	2.71 ± 1.48	0.958	0.843
Dependent	18	3.06 ± 1.35	2.30 ± 1.20	0.924	0.861
Obsessive-compulsive	19	3.52 ± 1.23	3.70 ± 1.36	0.924	0.820
Passive-aggressive	19	2.82 ± 1.07	3.41 ± 1.13	0.841	0.761
MCSD	10	—	6.79 ± 1.14	0.580	0.417

MCSD: Marlowe-Crowne Social Desirability Scale.

TABLE 3. Average scores and test-retest reliability coefficients of WISPI-IV in Spanish (n = 20)

Subscale	1 st application (n = 20)	2 nd application (n = 20)	r	p
	Mean and SD	Mean and SD		
Paranoid	4.65 ± 1.74	4.28 ± 1.09	0.466	<0.05
Schizoid	3.35 ± 0.96	3.57 ± 0.90	0.537	<0.01
Schizotypal	2.77 ± 1.10	2.71 ± 1.38	0.663	<0.01
Histrionic	3.72 ± 1.43	3.65 ± 1.53	0.630	<0.01
Narcissistic	4.22 ± 1.57	4.14 ± 1.66	0.927	<0.01
Antisocial	2.12 ± 0.65	2.06 ± 0.62	0.625	<0.01
Borderline	3.11 ± 0.87	3.03 ± 0.87	0.565	<0.01
Avoidant	2.94 ± 1.22	2.49 ± 0.79	0.284	NS
Dependiente	2.72 ± 1.26	2.26 ± 0.77	0.563	<0.01
Dependent	4.07 ± 1.09	4.15 ± 1.23	0.741	<0.01
Passive-aggres.	4.01 ± 1.03	3.71 ± 1.20	0.721	<0.01
MCSD	6.52 ± 0.97	5.82 ± 1.14	0.562	<0.01

MCSD: Marlowe-Crowne Social Desirability Scale. NS: non significant.

coefficients were not different, so that it is suggested that the Spanish version of the WISPI-IV very solidly conserves the consistency described by its authors.

Cronbach's alpha coefficients were moderate to high for practically all the sub-scales of the instrument, so that it can be considered that the instrument has adequate internal consistency. However, as in the case of the original version in English, the social desirability sub-scale demonstrated little internal consistency in spite of the fact that it only had 10 items and was implemented to the instrument while it was suggested as an adequate way to assess this construct²¹.

On their part, the test-retest correlations were moderate to high for most of the scales, which suggests that the instrument has adequate temporal stability, this being a requirement to infer that personality traits (vs states) are being measured. The only scale that showed a low correlation between the two applications was the *avoidant personality disorder* one. This can be explained in relationship to the present and well known discussion regarding conceptualization of avoidance as a personality trait instead of as an expression of an anxiety disorder of axis I (social anxiety disorder)²³.

In general terms, it can be concluded that the Spanish version of the WISPI-IV is a reliable instrument to assess personality disorders in agreement with the DSM-IV diagnostic criteria and based on the SASB psychosocial model¹⁶. In this sense, the present study supplies evidence regarding the suitability of the assessment of the SASB dimensions to make predictions of specific personality disorder diagnoses^{18,20}.

There is a background of valuable efforts dedicated to this task of determining the effectivity of measurements of theoretical models of personality to diagnose personality disorders according to the American Psychiatry Association criteria. Such is the case of the temperament and character inventory^{24,25}, as a measure of the perso-

nality model of Cloninger²⁶. Svrakic et al²⁷. showed that differential diagnosis of the personality disorders can be established in agreement with the DSM-III-R criteria based on this instrument.

Nevertheless, it is necessary to carry out future validity studies of the Spanish version of the WISPI-IV, as the sensitivity and specificity test, using a structured interview as the «gold standard», which was already carried out for the English version²⁸. The final proof of the utility of this instrument will be given undoubtedly by the fact that it adequately discriminates specific populations. It is considered that the availability of the version in Spanish can contribute to the development of the research lines in this sense in Spanish speaking populations.

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