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Translation into Spanish and validation of the Snaith-Hamilton Pleasure Scale (SHAPS) for anhedonia

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Introduction: The inability to experience pleasure, anhedonia, is recognized as all hallmark symptom of depression. A 14-item, self-report scale developed for the assessment of hedonic capacity: the Snaith-Hamilton Pleasure Scale (SHAPS) has proved to be a reliable and valid psychometric instrument.

Objective: Because there are no versions of the scale in other languages, our objective in this study was to translate the instrument into spanish and to determine if the new version maintained the validity and reliability of its original english version.

Methodology: The scale was translated into spanish and after reaching final consensus applied to a group of depressed patients participating in a pharmacological trial. The Hamilton Depression Rating Scale (HDRS) was also applied for comparative purposes.

Results: Our results demonstrate that the SHAPS in its spanish version maintains the validity and reliability level of the original english version. A moderate internal consistency was determined by Cronbach alpha value of 0.77.

Conclusion: our results demonstrate the spanish version of the SHAPS has validity and reliability similar to its original version, and thus it represents a good alternative to evaluate anhedonia in spanish-speaking populations.

Key words: Anhedonia, Depression, Validity, Reliability

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Traducción al español y validación de la Escala de Placer Snaith-Hamilton para Anhedonia (SHAPS)

Introducción: La incapacidad para experimentar placer (anhedonia), es un síntoma fundamental de la depresión. Con el desarrollo de un instrumento específico para evaluar la capacidad hedónica de los pacientes: la Escala de Snaith-Hamilton para el Placer (SHAPS) de 14 ítems, se empezó a contar con un instrumento psicométrico capaz de identificar fiablemente la presencia de esta manifestación sintomática. Esta escala en su versión original mostró una adecuada validez y fiabilidad. Posteriormente, sus características psicométricas fueron confirmadas al compararla con otras escalas de depresión.

Objetivo: Debido a que no se cuenta con una versión en idioma castellano, en este trabajo se llevó a cabo la traducción por consenso del instrumento y su posterior aplicación para determinar si se mantenían su validez y su fiabilidad.

Metodología: Se aplicó la escala a un grupo de pacientes diagnosticados con depresión mayor por medio de una entrevista clínica estructurada, que participaron en un estudio farmacológico y se incluyó también la escala de Hamilton para la Depresión (HAM-D).

Resultados: El instrumento mostró una adecuada validez discriminante al poder distinguir el tono hedónico de la depresión, corroborando cómo éste puede ser un rasgo independiente de la sintomatología depresiva que se está evaluando. Se obtuvo un nivel moderado de consistencia interna determinada por la prueba alfa de Cronbach (0.77).

Conclusión: Los resultados obtenidos muestran que la versión de la escala SHAPS en idioma español es una versión válida y fiable.

Palabras clave: Anhedonia, Depresión, Validez, Fiabilidad

INTRODUCTION

Although incapacity to experience pleasurable sensations or anhedonia is a term that has existed since the first descriptions of general psychopathology, it acquired importance after the second half of the last century when it was identified as a basic characteristic of some forms of depression with good response to antidepressants¹. Anhedonia expressed as a clinical element expressed in some mood state disorders became important when it appeared as part of the diagnostic criteria of major depressive disorder in the third version of the American Psychiatric Association Classification (DSM-III)². At present, although not exempt from controversy, it is considered as a basic trait of melancholic depression, this being understood as an endogenous subtype or as a specific form of the disease³.

There must be a precise definition with adequate ways of identifying and measuring anhedonia in order to consider it as a specific diagnostic element or as a modifier of the basic depressive picture. Attempts have been made for some time now to develop clinical scales for its identification. However, it was not until the Snaith-Hamilton Pleasure Scale (SHAPS) appeared that a more practical self-applicable instrument than the previous ones could be counted on in order to evaluate the presence of the essential characteristics of anhedonia. The SHAPS scale quantifies the grade with which a person can experience pleasure or is able to anticipate a pleasurable experience. The items that are included in it are related to experiences that most people generally have so that their generalization is assured. The SHAPS scale covers four domains of hedonic experience: interest/pastimes, social interaction, sensory experience and satisfaction with food and drink. The results of the pilot study demonstrated that the scale had a score range that is wide enough to differentiate abnormal from normal responses. This study also showed that the instrument had satisfactory validity and reliability for its use to be recommended in psychopathology research.4

In order to be able to apply this instrument in the Spanish-speaking population, the purpose of this work was to obtain a version of the SHAPS scale translated into Spanish and once the procedure was completed, to determine its validity and reliability by applying it to a group of patients diagnosed of major depression.

METHODOLOGY

Subjects

The study was carried out in accordance with the Good Clinical Practice Guidelines. The reason for their participation was explained to all the patients and they agreed to sign an

informed consent form. The patient sample was collected from several psychiatric care centers in Mexico during the months of March to May 2012. Patients aged 18 to 60 years with an episode of major depression according to the DSM-IV-TR⁵ determined by application of a structured clinical interview for axis I disorders of said diagnostic criteria (SCID-I)⁶ were included. Patients with medical diseases that were not controlled, with neurological diseases or with background or current evidence of having a substance abuse/dependence disorder were excluded. Cases with other diagnosis on axis I were also excluded.

A total of 111 patients diagnosed of major depression who agreed to participate in the study were recruited. The Kaiser-Meyer-Olkin measurement of sampling adequacy was 0.76, this being indicative that the sample size was appropriate to apply a factor analysis to the instrument.

Procedure

The procedure to translate the SHAPS was based on the American Research Group recommendations⁷. First, the scale was translated from English into Spanish by two independent bilingual translators. Both translations were reviewed by the authors of this paper and by two mental health professionals not linked to the study. The former was done in order to reach a consensus on the most understandable way to express each item in Spanish. The final version obtained from the translation process, revision of the experts and of the consensus, was that which was finally applied to the study for the validation of the SHAPS. Its psychometric properties were verified and they are shown in Figure 1.

Once the final version of the translated scale was available, its validation was performed. To do so, it was applied to a sample of patients selected with the previously mentioned characteristics. All of the patients were also administered the 17-item version of the Hamilton Rating Scale for Depression (HAM-D)⁸ to obtain the discriminant validation of the SHAPS scale. The participating clinicians had previously made a calibration process of the application of the HAM-D scale to verify its consistency.

Statistical analysis

The data obtained was analyzed with the 17.0 version of the SPSS statistical program. As a first procedure, asymmetry and kurtosis of the scale was determined as well as the Kolmogórov-Smirnow test to evaluate normal distribution of its total scoring.

After, an analysis of the principal components was made with varimax rotation to obtain the construct validity of the instrument. Upper values were established at 1 as threshold criterion for the factors extractions. Those items

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Instructions: This questionnaire is designed to evaluate how much pleasure or pleasurable sensations you have experienced over the last few days.

It is important for you to completely read the statements and to check the answers that best describes it with an "X."

The information obtained will serve to know better how you feel and to offer you the best treatment.

		Totally disagree / Totalmente en desacuerdo	Disagree / En desacuerdo	Agree / De acuerdo	Totally agree / Totalmente de acuerdo
1	Disfruto de mi programa favorito de radio o televisión/ l would enjoy my favorite television or radio program				
2	Disfruto estar con mi familia o amigos/ I would enjoy being with family or close friends				
3	Disfruto mis pasatiempos/ I would find pleasure in my hobbies and pastimes				
4	Disfruto de mi comida favorita / I would be able to enjoy my favorite meal				
5	Disfruto de un baño caliente o refrescante/ I would enjoy a warm bath or refreshing shower				
6	Me causa placer percibir el aroma de las flores, de la brisa o del pan recién hecho/ I would find pleasure in the scent of flowers or the smell of a fresh sea breeze or freshly baked bread				
7	Disfruto ver a otras personas sonreír / I would enjoy seeing other people's smiling faces				
8	Disfruto el verme bien cuando trato de cuidar mi apariencia/ I would enjoy looking smart when I have made an effort with my appearance				
9	Disfruto leer un libro, una revista o el periódico/ I would enjoy reading a book, magazine or newspaper				
10	Me resulta muy agradable el tomar una taza de café, de té o de mi bebida favorita/ I would enjoy a cup of tea or coffee or my favorite drink				
11	Me produce placer el fijarme en pequeños detalles como un día soleado o una llamada telefónica de un amigo/ l would find pleasure in small things; e.g., bright sunny day, a telephone call from a friend				
12	Disfruto un paisaje o una vista hermosa I would be able to enjoy a beautiful landscape or view /				
13	Disfruto el poder ayudar a otros/ I would get pleasure from helping others				
14	Disfruto cuando otras personas me halagan/ I would feel pleasure when I receive praise from other people				

Figure 1	Snaith-Hamilton for Pleasure Scale for Anhedonia (SHAPS)
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whose estimate of the shared variance (communality) was greater than 0.40 were included in the analysis and assigned to the factors. Those items whose communality was less than 0.40 were excluded from the analysis. After, the discriminant validity was obtained by means of the Pearson's correlation coefficient among the total scorings of the SHAPS and HAM-D scales. Finally, internal consistency of the total score of the SHAPS scale was determined with Cronbach's alpha.

RESULTS

Sample description

Of the 111 patients included with major depression, 60 (54.1%) had a first episode and 51 (45.9%) a recurrent episode. Seventy seven (69.4%) were women and 34 (30.6%) men. Average age of all the subjects was 39.4 years (SD 12.4).

Table 1	Factor load of the items on the SHAPS	scale				
	Items	Factors				
		Sensory experience	Food/ drink	Social	Interests / pastimes	
6. Scent of th	6. Scent of the flowers, breeze or bread					
7. Other persons smiling		0.647				
11. A sunny day or telephone call		0.790				
12. Beautiful	12. Beautiful landscape or view					
13. Being able	13. Being able to help other					
4. My favorit	4. My favorite food		0.724			
5. Warm bath or refreshing bath			0.669			
9. Read a boo	9. Read a book, magazine or newspaper		0.770			
10. Have coffe	10. Have coffee, tea or favorite drink		0.449			
2. Be with my family or friends				0.461		
8. See myself well when I take care of my appearance				0.785		
14. Praise from other persons				0.838		
1. Favorite radio or television program					0.706	
3. pastimes					0.817	
Eigen value		3.72	2.46	1.20	1.16	
Variance (%)		26.62	17.62	8.63	8.29	

Distribution of the total score

The analysis of the data showed that the scale had acceptable asymmetry (-0.48, SD=0.22) and kurtosis (-0.27, SD=0.45) levels. Furthermore, the Kolmogórov-Smirnov test showed a normal distribution of the total scoring with a Z value=1.12 (p=0.15).

Validity and reliability

Four factors accounting for 61.17% of the variance were identified. These mostly corresponded to the originally defined dimensions of the scale in regards to hedonic experience: interests/pastimes (items 1 and 3), social interaction (items 2, 8 and 14), sensory experience (items 6,

7, 11, 12 and 13) and satisfaction with food and drink (items 4, 5, 9 and 10). These data are shown in table 1 in accordance with their factor load (Table 1).

No significant association was observed between the total scores of the SHAPS and HAM-D scales (r=0.02, p=0.83) and the internal consistency of the form was moderate (Cronbach's alpha=0.77).

DISCUSSION

The results obtained show that the SHAPS scale version in Spanish is a valid and reliable version. The data clearly show four factors. However, some of the items did not theoretically correspond to the dimensions proposed. This is the case of the following:

Item 13 "helping others" entered into the "sensory experience" factor when, in theory it would be more adequate to include it in "social interaction."

Item 5 "enjoy a bath" entered into the food and drink satisfaction" factor, when it would be more adequate in that of "sensory experience."

Item 9 "reading" entered into "food and drink satisfaction," factor when in theory, it would be more adequate in interests and pastimes."

On the other hand, it can be seen that the use of dichotomic responses limit the expression of the perception of the concepts since they may provide a very wide spectrum. It can be considered that the finding of a moderate level of reliability in the total score of the scale could be due to this limitation of the original questionnaire. This aspect would them be improved if a Likert-type response format would be used with greater intermediate options between the concepts of agree and disagree since the four response options of the scale are integrated into two scores.

In general, and in spite of the limitations mentioned, the instrument showed adequate discriminant validity since it distinguishes the hedonic tone from depression. This corroborates how this can be an independent trait of the depressive symptoms that is being evaluated. In subsequent studies, it will be important to evaluate the convergent validity in our translated version, specifically its total score with specific items that evaluate this area in other depression assessment instruments such as, for example the Montgomery-Asberg for Depression Scale (MADRS)⁹, as was done in a study after the original version¹⁰.

CONCLUSIONS

The SHAPS scale version in Spanish shows that the instrument has good internal consistency and adequate construct validity. Because of these characteristics, it maintains the psychometric elements of the original version in English, it being a valid, reliable and unidimensional instrument to evaluate the hedonic capacity of patients who have a depressive disorder. Thus, it can be applied in clinical trials that require the specific evaluation of aspects regarding anhedonia in adult patients with depressive disorders. In addition, it has been demonstrated that the scale is adequate to evaluate the hedonic tone in non-clinical populations, which is one more advantage that can be applied in social

psychology studies, among others.¹¹ It has also been applied to other neurological conditions such as Parkinson's Disease.¹²

In conclusion, having the Spanish version of this scale will make it possible to carry out studies in different areas of knowledge that are interested to evaluate the hedonic tone and its variations both under pathological as well as normality conditions.

CONFLICT OF INTERESTS

Both authors declare they have no conflict of interests with the content and purpose of the work.

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