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Validation into the Spanish language of the *Self-Harm Questionnaire* for detecting self-harming in adolescents

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Original article

ABSTRACT

Background

Self-harming behavior is any behavior in which a person hurts or harms themselves. These behaviors are an increasing phenomenon among adolescents, and can be considered predictors of death by suicide, making their timely identification crucial. The *Self Harm Questionnaire* allows self-harming thoughts and behaviors to be identified.

Objective

The aim of this study was to validate the instrument into the Spanish language and to determine its diagnostic value for detecting self-harming behavior in Mexican adolescents under psychiatric follow up.

Method

The translation-retranslation procedure was used for the adaptation of the questionnaire into Spanish. A sample of 106 11- to 17-year-old adolescents under follow-up because of affective disorders or anxiety was selected for the application of the questionnaire. Internal consistency was evaluated through Cronbach's α reliability coefficient, and Spearman's coefficient of correlation was determined through a test-retest after three months of the test's first administration. Afterwards, an evaluation of the clinical records was performed to assess the sensitivity and specificity of the test to detect self-harming behavior.

Results

The translated questionnaire has a Cronbach's α of 0.960, and a three-month temporal stability of 0.9787. Its sensitivity to detect self-harming behavior was 97.96%, and its specificity was 54.39%, compared to the clinical records.

Discussion and Conclusion

The study results suggest that the translated questionnaire is a valid and reliable tool to detect self-harming behavior in Mexican adolescents. Rapid and timely identification in this population of patients is crucial to avoid suicides. The use of this questionnaire can help identify these patients.

Key words: Self-harming behavior, suicide, diagnosis, validation studies.

RESUMEN

Antecedentes

El autolesionismo comprende las conductas encaminadas al daño físico de la propia persona. Estas conductas son un fenómeno en aumento entre los adolescentes y pueden ser consideradas como predictores de muerte por suicidio, por lo que su identificación oportuna es una necesidad. El Cuestionario de autolesionismo permite identificar la presencia de pensamientos y conductas autolesivas.

Objetivo

Validar el cuestionario de autolesionismo al español y determinar su valor diagnóstico para detectar autolesionismo en adolescentes mexicanos que reciben atención psiquiátrica.

Método

Se realizó el procedimiento de traducción-retrotraducción para la adaptación de la escala al idioma español. Se seleccionó una muestra de 106 adolescentes de entre 11 y 17 años de edad en seguimiento por trastornos afectivos o ansiedad para la aplicación de la escala. Se evaluó la consistencia interna mediante el coeficiente de fiabilidad α de Cronbach y se determinó el coeficiente de correlación de Spearman por medio de una prueba test-retest tres meses después de la primera administración. Posteriormente, se realizó una revisión del expediente clínico para determinar la presencia de autolesionismo y realizar un análisis de la sensibilidad y especificidad del cuestionario para detectar el fenómeno.

Resultados

El cuestionario traducido presentó un α de Cronbach de 0.960 y una estabilidad temporal a tres meses de 0.9787. La sensibilidad para detectar autolesionismo fue de 97.96%, y la especificidad de 54.39%, comparadas con el expediente clínico.

Discusión y conclusión

Los resultados de este estudio sugieren que la escala traducida es una herramienta válida y confiable para detectar autolesionismo en adolescentes mexicanos. La identificación rápida y oportuna de esta población es crucial para evitar suicidios. El uso de la escala puede ayudar a identificar a estos pacientes.

Palabras clave: Autolesionismo, suicidio, diagnóstico, estudios de validación.

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BACKGROUND

Self-harming encompasses behaviors directed towards physically harming oneself, regardless of the type of injury inflicted, the reason for doing so, or the presence of any suicidal intent. However, for practical and reporting purposes, a differentiation is made between acts of self-harm with and without suicidal intent.[1] This behavior is a growing phenomenon among the adolescent population and can be considered as a predictor of death, given that its presence is associated with an increase up to ten times of suicide risk.[2] It is estimated that the prevalence of these behaviors in adolescents is 13% to 26% in those who have suicidal thoughts.[3] In Mexico, a prevalence of 5.6% to 17.1% has been reported, according to the definition used for self-harming.[4]

Systematic evaluation of the causes of self-harm can help doctors to better understand the sense of self-harming behavior, select the appropriate treatment, suggest alternative strategies, and in future, prevent suicidal behavior.[5] Continual assessment, use of multiple informants, and a combination of self-reporting measures with psychiatric interviews are important tools currently used to identify self-harming behaviors in clinical practice.[6]

As a complement to these tools, Ougrin and Boege recently developed a questionnaire to identify self-harming in adolescents.[6] The Self-Harm Questionnaire (SHQ) is a self-applicable questionnaire with 15 items focusing on identifying the presence of self-harming thoughts and behaviors in adolescents. The first three items are screening items to determine the presence of self-harm; the rest focus on specific aspects of self-harming behavior: last episode, method used to self-harm, reason, experience during self-harm, purpose of self-harm, substances consumed during the act, planning and execution of the act, and communication with another person during the episode. The authors found that the sensitivity of the scale for detecting self-harm was 95%, its sensitivity was 35%, its positive predictive value was 72%, and its negative predictive value was 90%.

Due to the SHQ's usefulness in quickly and precisely detecting self-harm, the aim of this investigation was to validate it in Spanish and in the Mexican population, and determine its diagnostic value to detect self-harming behavior in adolescents who receive psychiatric care through comparing the results with the clinical diagnosis recorded on file.

METHOD

Participants

After the assessment and approval of the study by the Research Ethics Committee of the Dr. Everardo Neumann Peña Psychiatric Clinic (record CEI-CPENP-13-07), a sample of convenience was selected of 106 adolescents aged 11-17 with no history of mental retardation, generalized development disorders, or psychosis, and who were under follow-up due to affective disorders, behavioral disorders, or anxiety for at three months before the start of the study. The patients were recruited in the outpatients of child Psychiatry at the Dr. Everardo Neumann Peña Psychiatric Clinic, in San Luis Potosí, Mexico, during the period between October 2013 and March 2014. The participants and their legal guardians read and signed the informed consent form to participate in the study voluntarily, and the research principles on human research set out in the Helsinki Declaration's 2013 revision were upheld at all times.[7]

Adaptation of the scale

To adapt the scale to the Spanish language, the translation-retranslation process was followed.[8] After obtaining consent from the SHQ's authors, a translator with clinical experience translated the SHQ scale into Spanish, and then an English-speaking independent translator retranslated the Spanish version back into English. The new version was reviewed by the study's researchers who in agreement determined its adequacy with the original text.

Pilot test

Twenty subjects were selected at random for the application of the SHQ translated into Spanish (SHQ-E) to determine the average application time and comprehensibility of the test, and to evaluate the presence of doubts around any concept of the Scale. According to the pilot results, the original text did not require any modification (Appendix 1).

Validation of the SHQ-E scale

The internal consistency of the SHQ-E was determined through the Cronbach's α coefficient of reliability, and for the study of temporal reliability, Spearman's coefficient of correlation was determined through a test-retest of a random sample of 37 subjects three months after the test was first administered.

Furthermore, a researcher blind to the results of the scale carried out a review of the clinical reports of the 106 patients assessed to determine whether there was any record of self-harming in their notes from pedopsychiatric, psychological, and/or family therapy service assessments, with the aim of analyzing the sensitivity and specificity of the questionnaire for detecting the phenomenon.

Finally, a log-linear model was used to determine the presence of differences between the proportion of patients with self-harm entered in the report, according to their clinical diagnoses.

The statistical analysis was carried out with the R package v.3.0.3[9] with a confidence interval of 95%.

Table 1. Sociodemographic characteristics

Variable	Value
Age	14.60 ± 1.88 years
Sex	
Men	39 (36.79%)
Women	67 (63.21%)
Education	
Elementary	25 (23.58%)
Secondary	66 (62.26%)
High school	15 (14.15%)
Socioeconomic level	
Low	(<1.5 SM) = 57 (53.77%)
Medium	(1.5 a 3 SM) = 49 (46.23%)
High	(>3 SM) = 0 (0%)
Civil status	
Single	100 (94.34%)
Civil union	6 (5.66%)
Clinical diagnosis	
Major depressive disorder	64 (60.38%)
Attention deficit hyperactivity disorder	20 (18.87%)
Generalized anxiety disorder	20 (13.21%)
Dysthymia	8 (7.55%)

These are the characteristics of the population where the questionnaire was validated. Education shows the highest level of education completed. Low socioeconomic level is defined as the perceived family salary by the minimum salary valid in 2014 in geographical zone "B" of Mexico. MS: minimum salaries. N = 106.

RESULTS

The sociodemographic characteristics of the participants in the study are summarized in table 1. The mean time necessary for the application of the SHQ-E was 15 ± 1.19 minutes.

The SHQ-E had a Cronbach's α of 0.960, CI 95% (0.954 - 0.966) and a three-month temporal stability of 0.9787, CI 95% (0.959 – 0.989), p <0.001.

Using the SHQ-E, 74 patients were identified who self-harmed, and 32 who did not. The report identified 49 patients who self-harmed and 57 who did not (table 2). The sensitivity of the SHQ-E to detect self-harm was 97.96%, with a specificity of 54.39%. The positive predictive value of the test was 64.86% and the negative predictive value was 96.88%; the positive likelihood ratio (LR+) was 2.15, and the negative likelihood ratio (LR-) was 0.04.

No significant differences were found between the proportion of patients who self-harmed according to their clinical diagnosis, except among patients with dysthymia and Major Depressive Disorder (OR = 2.44, CI 95% 1.54 – 3.64, p <0.001) (table 3).

Table 2. Diagnostic capacity of the SHQ-E for self-harm

	Clinical report		
SHQ - E	**(+)**	**(-)**	**Total**
(+)	48	26	74
(-)	1	31	32
Total	49	57	106

This shows the diagnostic capacity of the SHQ-E to detect the presence of self-harm compared to records in the clinical files, detected during the structured interview (gold standard).

Table 3. Self-Harm according to clinical diagnosis

	Self-Harm	
Clinical diagnosis	No	Yes
Dysthymia	4	4
Generalized anxiety disorder	10	4
Attention deficit hyperactivity disorder	15	5
Major depressive disorder	46	18

This measures the presence of self-harm recorded in the clinical files, according to patient diagnoses. N=106.

DISCUSSION AND CONCLUSION

The results of this study suggest that the SHQ-E is a valid and reliable tool, as its internal consistency was 0.96, indicating excellent reliability.[10]

The test's temporal reliability was excellent (0.97) and very similar to that reported by Ougrin and Boege (0.95).[6] In both studies, the test-retest was performed at three months, because of which future studies will need to assess if the consistency is maintained after longer periods of time.

The test's predictive values 64.86% (positive) and 96.88% (negative), were similar to those of the original article, which were 72.0% and 90.0%, respectively.[6] This indicates its potential for use of the first three screening items to precisely highlight the presence of self-harming in adolescents.

These results indicate that both the SHQ and the SHQ-E are tools that have good external validity, which could mean that they could be generalized to other populations. However, in both cases, the patients studied were adolescents who were already attending outpatient psychiatric services, because of which it would need to be investigated as to whether the predictive values would really remain consistent.

Like the original study, the primary limitation of this study is that it only focused on the detection of self-harming behavior, because of which it is not possible to determine if the score obtained shows association with an increased risk of suicide and whether that gradient remains constant between episodes. Furthermore, part of the survey is only qualitative, and therefore it is useful in gathering information but not for establishing gradients of severity.

It is notable that no significant differences were found between the clinical diagnosis and the presence of self-harm, except for patients with dysthymia and Major Depressive Disorder. This is probably due to the sample size of the groups, and increasing this would make it possible to observe the presence of any differences.

Fast and timely identification of self-harm in adolescents is crucially important to avoid suicides. The use of the SHQ-E can help to precisely identify such patients.

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Conflict of interest

The authors do not declare any conflict of interest.

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REFERENCES

1. **Hawton K, Saunders KEA, O'Connor RC. Self-harm and suicide in adolescents. Lancet. 2012 Jun 23;379(9834):2373–2382.**
2. **Ougrin D, Banarsee R, Dunn-Toroosian V, Majeed A. Suicide survey in a London borough: primary care and public health perspectives. J Public Health Oxf Engl. 2011 Sep;33(3):385–391.**
3. **Ougrin D, Tranah T, Leigh E, Taylor L, Asarnow JR. Practitioner review: Self-harm in adolescents. J Child Psychol Psychiatry. 2012 Apr;53(4):337–350.**
4. **Albores-Gallo L, Méndez-Santos JL, Xóchitl-García Luna A, Delgadillo-González Y, Chávez-Flores CI, Martínez OL. Nonsuicidal self-injury in a community sample of older children and adolescents of Mexico City. Actas Esp Psiquiatr. 2014 Aug;42(4):159–168.**
5. **Scoliers G, Portzky G, Madge N, Hewitt A, Hawton K, de Wilde EJ, et al. Reasons for adolescent deliberate self-harm: a cry of pain and/or a cry for help? Findings from the child and adolescent self-harm in Europe (CASE) study. Soc Psychiatry Psychiatr Epidemiol. 2009 Aug;44(8):601–607.**
6. **Ougrin D, Boege I. Brief report: the Self Harm Questionnaire: a new tool designed to improve identification of self harm in adolescents. J Adolesc. 2013 Feb;36(1):221–225.**
7. **World Medical Association. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. JAMA J Am Med Assoc. 2013 Nov 27;310(20):2191–2194.**
8. **Antonio Augusto Gordillo Moscoso, Úrsula Fabiola Medina Moreno, Mauricio Pierdant Pérez. Manual de Investigación Clínica. 1a ed. México D.F.: Manual Moderno; 2012. 202 p.**
9. **R Core Team. R: A language and environment for statistical computing [Internet]. Viena, Austria: R Foundation for Statistical Computing; 2014. consultada 22 de junio de 2015 Available from: http://www.R-project.org/**
10. **Jose M Cortina. What is coefficient alpha? An examination of theory and applications. J Appl Psychol. 1993 Feb;78(1):98–104.**

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Appendix 1: Self-Harm Questionnaire in Spanish

Screening items:

Item 1. Have you ever thought about hurting yourself on purpose, without wanting to die? For example, have you ever thought about cutting your arms, wrists, or other part of your body, or have you thought about taking an overdose? (Mark one of the boxes)

1.- No ☐
2.- Yes, once ☐
3.- Yes, two, three, or four times ☐
4.- Yes, five times or more ☐

Item 2. Have you ever thought about taking your own life? (Mark one of the boxes)

1.- No ☐
2.- Yes, once ☐
3.- Yes, two, three, or four times ☐
4.- Yes, five times or more ☐

Item 3. Have you ever hurt yourself on purpose? For example, have you ever cut yourself, or taken an overdose that wasn't by accident? This includes all episodes of self-harm, whether or not you wanted to die in that moment. (Mark one of the boxes)

1.- No ☐
2.- Yes, once ☐
3.- Yes, two, three, or four times ☐
4.- Yes, five times or more ☐

If you answered "No" to Item 3, this is the end of the questionnaire. You only need to continue if you answered "Yes" to Item 3.

Item 4. When did you last hurt yourself? (Mark one of the boxes)

1.- In the past 24 hours ☐
2.- In the past week ☐
3.- In the past month ☐
4.- In the past year ☐
5.- More than a year ago ☐

Item 5. When you last hurt yourself, what did you do...? (Mark one of the boxes)

1.- Cut your skin (specify how) ☐

_____

2.- Took an overdose or took poison (specify how) ☐

_____

3.- Both; you cut your skin and took an overdose or took poison (specify how) ☐

_____

4.- You did something else (specify how) ☐

_____

Item 6. The last time you hurt yourself, what happened that made you think of hurting yourself? (Choose the boxes that apply)

1.- Family problems ☐
2.- Problems with boyfriend/girlfriend ☐
3.- Problems with the police ☐
4.- Problems at school ☐
5.- Health problems ☐
6.- Problems with alcohol ☐
7.- Problems with any drugs ☐
8.- Something else (Please specify): ☐

_____

Item 7. What feelings did you experience before hurting yourself? (Choose the boxes that apply)

1.- Anger ☐
2.- Sadness ☐
3.- Worry ☐
4.- Excitement ☐
5.- Disorientation ☐
6.- Tension ☐
7.- Shame ☐
8.- Fear ☐
9.- Something else (Please specify): ☐

_____

Item 8. What feelings did you experience after hurting yourself? (Choose the boxes that apply)

1.- Anger ☐
2.- Sadness ☐
3.- Worry ☐
4.- Excitement ☐
5.- Disorientation ☐
6.- Tension ☐
7.- Shame ☐
8.- Fear ☐
9.- Relief ☐
10.- Something else (Please specify): ☐

_____

Item 9. After hurting yourself, how did you feel? (Mark one of the boxes)

1.- You felt better ☐
2.- You felt worse ☐
3.- You felt the same ☐

Item 10. When you last hurt yourself, what did you want...? (Mark one of the boxes)

1.- To die ☐
2.- To punish yourself ☐
3.- To show somebody else how you felt ☐
4.- To stop feeling bad ☐
5.- To avoid doing something else ☐
6.- To feel better ☐
7.- To get others to do something ☐
8.- To get others to stop doing something ☐
9.- Something else (Please specify): ☐

_____

Item 11. When you last hurt yourself, what did you take...? (Mark one of the boxes)

1.- Drugs and alcohol ☐
2.- Drugs ☐
3.- Alcohol ☐
4.- Nothing ☐

Item 12. The last time you hurt yourself, how long did you spend thinking about it? (Mark one of the boxes)

1.- Months ☐
2.- Weeks ☐
3.- Days ☐
4.- Minutes ☐
5.- Seconds ☐

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Appendix 1: Self-Harm Questionnaire in Spanish (continued)

Item 13. Before the last time you hurt yourself, did you make any plan about how you were going to do it? (Mark one of the boxes)

1.- No ☐
2.- Yes, partially ☐
3.- Yes, in detail ☐

Item 14. Before you hurt yourself the last time, did you let anyone know of your intention? (Mark one of the boxes)

1.- Nobody ☐
2.- Somebody I knew ☐
Please specify who:

_____

How did you let them know?:

_____

3.- Somebody I didn't know ☐
How did you let them know?:

_____

Item 15. After you hurt yourself the last time, did you let anybody know what you had done? (Mark one of the boxes)

1.- Nobody ☐
2.- Somebody I knew ☐
Please specify who:

_____

How did you let them know?:

_____

3.- Somebody I didn't know ☐
How did you let them know?:

_____