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Spanish versions of assessment tools for functioning and activities daily living in schizophrenia: What do they measure?

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ABSTRACT

From the psychosocial rehabilitation perspective, the use of instruments based on a theoretical framework to assess the level of functioning in activities of daily living with good clinimetric properties is essential for people diagnosed with schizophrenia. In Spain, scales translated from other languages, usually English, are very frequently used; this involves a process of adaptation, beyond translation. The objective of this study was to review and compare a series of different scales used in psychosocial functioning assessment in the Spanish population focused on daily living activities. The selected instruments have been adapted into Spanish over the last 19 years and are aimed at people diagnosed with a severe mental disorder, usually schizophrenia. The results showed that the number of instruments adapted to the Spanish population was small, with several shortcomings in the adaptation process, either in translation, the confusion of concepts or metric properties of the scale. In conclusion, the conceptualisation and assessment of functioning in this field remains a complex and controversial issue. The development of new instruments based on a theoretical approach, such as the International Classification of Functioning, Disability and Health (ICF)¹ may be a great help in improving the psychosocial treatment of people diagnosed with a psychotic disorder.

KEYWORDS: assessment, functioning, activities of daily living, disability, schizophrenia.

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INSTRUMENTOS EN ESPAÑOL PARA LA EVALUACIÓN DEL FUNCIONAMIENTO Y LAS ACTIVIDADES DE LA VIDA DIARIA EN ESQUIZOFRENIA: ¿QUÉ MIDEN?

RESUMEN

Desde la perspectiva de la rehabilitación psicosocial, para la recuperación de las personas diagnosticadas de esquizofrenia es fundamental el uso de instrumentos basados en un marco teórico que evalúen el nivel de funcionamiento en las actividades de la vida diaria y que cuenten con buenas propiedades clinimétricas. En España, es muy frecuente el uso de escalas traducidas de otros idiomas, fundamentalmente el inglés. Esto supone que el instrumento debe pasar por un proceso de adaptación, no solo traducción. El objetivo de este estudio fue realizar una revisión y comparación de diferentes instrumentos utilizados para la evaluación del funcionamiento psicosocial en la población española centrados en las actividades de la vida diaria. Se han seleccionado instrumentos adaptados al español en los últimos 19 años y dirigidos a personas diagnosticadas con un trastorno mental grave, principalmente esquizofrenia. Los resultados del estudio muestran la escasez de instrumentos adaptados a población española, así como deficiencias en el proceso de adaptación, relacionadas con la traducción, la confusión de conceptos o las propiedades métricas de la escala. En conclusión, la conceptualización y evaluación del funcionamiento en este ámbito continúa siendo un tema complejo y controvertido. La creación de nuevos instrumentos desarrollados desde una aproximación teórica, como la Clasificación Internacional de la Discapacidad, el Funcionamiento y la Salud (CIF)¹, pueden ser de gran ayuda para mejorar la evaluación y, en consecuencia, el tratamiento psicosocial de personas diagnosticadas de un trastorno psicótico.

PALABRAS CLAVE: evaluación, funcionamiento, actividades de la vida diaria, discapacidad, esquizofrenia.

INTRODUCTION

Schizophrenia is considered one of the mental disorders with the greatest impact on the daily functioning of people who suffer from it²⁻⁵. It affects over 21 million people in the world, and is characterised by a set of symptoms that includes cognitive, behavioural and emotional dysfunctions, causing a deterioration in psychosocial functioning and sometimes disability^{2,5-7}. Its onset usually occurs in adolescence or early adulthood, before the person has reached optimal social, occupational and independent functioning⁸. This interruption in the life project of a person requires starting a process that can last for years. The objective of the treatment is to improve functioning in all spheres of life and not just alleviate the symptoms caused by the disease⁹⁻¹².

The most widely used therapeutic approach is psychosocial rehabilitation¹³, which is a combination of intervention strategies in addition to pharmacological treatment from a multidimensional and biopsychosocial perspective¹⁴. To promote independent living, attention is focused on the capacities and deficits of the patient, not only on the symptoms of the disease¹³. Through psychosocial rehabilitation, the team of professionals seeks to improve the performance of the person with schizophrenia in social and community activities and roles affected by the disease¹⁵.

Before starting the rehabilitation process, an adequate evaluation process is required, which includes, in addition to psychopathology, the general state of health, cognitive functioning, psychosocial functioning and an environmental context¹⁶. The evaluation of psychosocial functioning is considered part of the comprehensive evaluation of functioning, and includes an assessment of the social and occupational skills necessary to lead an independent life¹⁶. The psychosocial rehabilitation literature includes various tools for evaluating aspects such as food, hygiene, domestic activities, the use of personal objects, health care, transportation management, financial administration, job search and maintenance skills, social relationships and leisure¹⁷⁻²³. Systematic evaluation is necessary at the beginning and throughout the rehabilitation process to determine the level of performance, orient particular therapeutic interventions towards specific changes and provide the support and care the person requires at all times²⁴⁻²⁶. An adequate selection of instruments for evaluating psychosocial functioning greatly contributes to the success of the rehabilitation process, as it enables the professional to make an objective appraisal of the deficits to plan the intervention²⁷⁻²⁹.

In the evaluation, it is important to select standardised instruments with adequate clinimetric properties that have been tested beforehand on the target population³⁰. However,

many of the instruments used in rehabilitation services are constructed ad hoc for their own use, and lack sufficient sensitivity, reliability and validity³⁰. Many of them are also from the English-speaking world^{17,23,31}, and are often reduced to being a literal translation of the original, without the adaptation to concepts and estimation of reliability and validity that is required^{23,32}. Thus, there is little representation of the cultural context when used in cultures different to the original³³.

Also, the most important property of evaluation instruments is their validity, so adequate interpretations of the results can be made with appropriate decisions regarding treatment objectives. This requires a conceptual analysis of what is being measured: in our case, activities of daily living and functioning. From the perspective of the World Health Organisation (WHO) International Classification of Functioning, Disability and Health (ICF), the functioning of an individual is the result of the interaction between health conditions and contextual factors¹. The ICF describes functioning and disability as a dynamic interaction between health states (e.g. illnesses, disorders, injuries and trauma) and contextual factors (environmental and personal), so that deficits or problems in performing activities can modify one's own health condition^{1,34}. Using standardised language, the ICF organises information into two parts: firstly, on *functioning and disability* and, secondly, on *contextual factors*. The first part consists of two components: *Body Functions and Structures* (where the structures and functions of the human body are classified), and *Activities and Participation* (where activities and roles are classified). These, in turn, distinguish between *Capacity* (what a person can do without taking into account external aids or barriers) and *Performance* (what a person actually does, considering the aids or barriers). The second part covers different *Environmental and Personal Factors*^{1,35}. The basic core set for schizophrenia has recently been published³⁶⁻³⁹, consisting of a list of ICF categories, agreed upon by experts, that describe the most common problems in the functioning of people affected by a given health condition.

The importance of using precise concepts has recently been shown in a systematic review of schizophrenia assessment instruments and the framework of the ICF⁴⁰. According to the results of the study, the instruments most used to assess functioning in schizophrenia are aimed at assessing mental functions and symptoms (WAIS⁴¹, WSCT⁴² and PANSS⁴³), and not the interaction between health condition and contextual factors. However, the health condition of schizophrenia involves deficits or problems in carrying out activities and performing roles, as reflected in the basic core, although they are not always included in the evaluation instruments most used in this field⁴⁰.

In addition, it is common to find terms such as "activities of daily living" and "skills of daily living" (or adaptive skills) in studies on functioning and schizophrenia, which are frequently used synonymously when referring to different concepts. The term *skills* refers to the ability of the individual to carry out essential daily activities, while *activities of daily living* refer to the product of those skills, and are the result of the interaction between the person's abilities (skills), the tasks to be performed and the context in which they are performed⁴⁴. This confusion of terms constitutes a problem when comparing works in the field of psychosocial rehabilitation.

The concept of *activities of daily living (ADL)* arises from the field of health and rehabilitation and, as a result of its evolution, since the 1990s distinguishes between two categories of activities: *basic activities of daily living (BADL)* and *Instrumental Activities of Daily Living (IADL)*⁴⁴. This categorisation separates activities related to personal self-care independence and those that allow for financial independence and autonomy in other areas such as social, community and recreational participation⁴⁴. BADL are characterised by being universal and linked to survival and basic needs. They are directed towards oneself, and involve a minimum cognitive effort, being automatic from approximately 6 years of age. In general, this category includes feeding, going to the toilet, bathing, clothing, personal mobility, sleep and rest^{44,45}. Meanwhile, IADL involve greater cognitive and motor complexity and are linked to the environment. They are instrumental, because they are a means to obtaining or performing an action, and involve interaction with the environment. This category includes the use of different communication systems, writing, talking on the phone, community mobility, use of transport, maintaining one's own health, managing money, making purchases, caring for the home, using procedures and responding to emergencies^{44,46}.

In conclusion, the improvement in the functioning of patients with schizophrenia is the main objective of psychosocial rehabilitation⁴⁷, with participation in activities of daily living being fundamental. Thus, it may be of great interest for professionals in this field to investigate farther into the characteristics of instruments for assessing activities of daily living in the Spanish population diagnosed with schizophrenia, and to reflect on the quality of their adaptation^{18,48}.

METHODOLOGY

The study was carried out in two stages. In the first, the bibliography from the last 19 years was searched and reviewed for the evaluation of activities of daily living in the Spanish population diagnosed with schizophrenia. The

second stage consisted of analysing the contents and clinical properties of the instruments adapted to the Spanish population to evaluate activities of daily living from the perspective of psychosocial functioning in people with schizophrenia. This review is part of a larger study on the evaluation of ADL in adults between 18 and 65 years of age with more than 5 years of disease evolution.

The bibliography was searched using the PubMed and PsycInfo databases for the period from January 2000 to August 2019. The search strategy was: (assessment) AND (activity daily living) AND (schizophrenia); (assessment) AND (schizophrenia) AND (functioning); (assessment) AND (schizophrenia) AND (functioning) AND (activity daily living); (psychosocial rehabilitation) AND (activity daily living); (International Classification of Functioning, Disability and Health or ICF) AND (schizophrenia).

It produced 608 results, from which articles published in English and Spanish about studies of patients over 18 years of age diagnosed with schizophrenia in the Spanish population were selected. Studies aimed at first psychotic episodes and the geriatric population were ruled out, because early care programmes are aimed at people between 15 and 35 years of age at high risk of developing psychosis or in the first 5 years after the onset of psychosis⁴⁹. In the case of the geriatric population, it may present as a comorbidity with other pathologies that also interfere with psychosocial functioning⁵⁰.

The adaptation process, content and psychometric properties of the instruments submitted for use in the Spanish population were analysed from the works selected.

RESULTS

In the search "evaluation of activities of daily living", we found 2 publications that explicitly dealt with adaptation to the Spanish population - the Life Skills Profile instrument (LSP-20)⁵¹ and Basic Everyday Living Skills (BELS)⁵² - and 3 functioning evaluation scales. We also found the original Independent Living Skills Survey (ILSS) publication²⁰. Although we did not find any published article on its adaptation to Spanish, there was a validation study into Spanish that was the subject of a Final Master's Project in General Health Psychology⁵³.

In the "functioning" search, we found the following adaptations to Spanish: the World Health Organisation Disability Assessment Schedule 2.0 (WHODAS 2.0)⁵⁴; Personal and Social Performance (PSP)⁵⁵; Functioning Assessment Short Test (FAST)⁵⁶ and the California University Performance Skills Assessment (Sp-UPSA)⁵⁷.

Each of these instruments is described below:

Life Skills Profile (LSP-20)⁵¹

This is a scale designed to measure general functioning in activities of daily living. It was initially aimed at people diagnosed with schizophrenia, but was later applied to other diagnoses grouped under the broad category of severe mental disorder.

There are different versions, but only the LSP-39³¹ and LSP-20⁵¹ versions have been validated in Spanish. The latter consists of 20 items grouped into 4 factors: *therapeutic compliance* (3 items), *social initiative* (5 items), *self-care* (5 items) and *antisocial behaviour* (4 items); with each item having 4 response alternatives. The authors consider that LSP-20 is compatible with the WHO concept of disability, because the evaluator can choose whether to measure disability when scoring from 0 to 3, or ability if scoring from 1 to 4. The total factor score corresponds to the sum of the scores of the items⁵¹.

The evaluation should be made on the general condition of the patient during the previous 3 months and not in periods of crisis. The administration does not require specific training, and can be completed by both professionals and family members⁵¹.

Basic Everyday Living Schedule (BELS)⁵²

This was originally developed by the London Team for the Assessment of Psychiatric Services⁵⁸ and adapted into Spanish in 2000 by the Andalusian Mental Health Research Group. It was designed as a research instrument to evaluate changes in the performance of specific daily coexistence skills in people with severe mental disorders. For the evaluation, the individual's behaviour in the previous month should be considered, with the exception of infrequent behaviours, in which case the observation period is 6 months. The questionnaire is made up of 26 items grouped into 4 areas: *self-care* (10 items), *domestic skills* (7 items), *community skills* (4 items), *social relationships and activity* (5 items). Each item is scored according to 2 scales: one that measures the degree of opportunity to carry out activities independently, and the other that measures actual performance in daily life²².

The evaluator needs the collaboration of an informant who knows the abilities of the person evaluated well (if the patient is admitted to a hospital or resides in a centre). However, if the evaluated person lives independently in the community, they can answer the questions themselves.

The degree of opportunity scale is scored 0, 1 or 2 according to the criteria described in the manual. The degree of execution is scored 0, 1, 2, 3, 4, or 9 according to the corresponding criteria. The total score corresponds to the average of the items on each scale²².

Independent Living Skills Survey (ILSS)²⁰

There is a Spanish adaptation by Fernández Larrinoa et al. in 1994, from the first original version in English^{18,25}. However, a new version was issued in 2000²¹, which has several adaptations into Spanish^{53,59}.

The ILSS assesses the frequency with which the subject performs the tasks necessary to lead a satisfactory and independent life in the community. There are two versions: one for the patient and one for a relative. The latter was used for the adaptation to Spanish, and consists of 102 items evaluating 12 domains: *appearance and clothing, personal hygiene, food handling, cleanliness and organisation, health maintenance, money management, transportation, leisure and community, job seeking, job maintenance, eating and social relationships*. It uses a Likert-type scale of 0-4, and takes the last 30 days from the evaluation date as a reference. The total score for each domain is the result of adding the corresponding items⁵³.

The WHO Disability Assessment Schedule (WHODAS 2.0)⁶⁰

This is a multidimensional instrument developed by the WHO Classification, Terminology and Standards Group to measure disability. It is based on the ICF conceptual framework, and has a direct relationship with the *Activities and Participation* component. It can be used in different groups and contexts, covers all ICF domains and is applicable to all health conditions⁵⁴. There are two versions: the full version of 36 items and a shorter version of 12 items. Both versions also have the *self-report* and *observer report* type. When assessing, the person's functioning during the 30 days prior to the evaluation must be taken into account.

WHODAS 2.0 covers 6 domains: *cognition, mobility, self-care, relationships, household, school and work life activities and participation*, and is available in over 30 languages (including Spanish). Evaluators need prior training which can be done with the manual. Items are scored from 1 to 5 according to the degree of difficulty, and the result is obtained in each of the domains by adding the items⁵⁴.

Personal and Social Performance (PSP)⁶¹

This is one of the most widely used instruments in current research for the evaluation of social functioning^{60,62-65}. It was originally developed in 2000⁶¹ using the

SOFAS (Social and Occupational Functioning Assessment) scale as a model, and was adapted to Spanish in 2011⁵⁵. It assesses the patient's functioning in 4 areas: *self-care; habitual social activities (including work and study); personal and social relationships; and disruptive and aggressive behaviour*. The total score is obtained in several phases: first, the severity of existing difficulties in the 4 areas is evaluated using a 6-point Likert-type scale. Then, a 10-point interval is selected based on the degrees of dysfunction determined above; the ranges are: *excellent functioning in all 4 areas* (91-100); *good functioning in the 4 main areas* (81-90), *some difficulties in one or more areas* (71-80); and *manifest but not marked difficulties in one or more areas* (61-70). Finally, it is adjusted within a 10-point interval to obtain a final score between 0 and 100⁵⁵.

The PSP has advantages over SOFAS, its predecessor: greater clarity in defining functional areas and questions; and the inclusion of degrees of disability with operational criteria⁵⁵.

Functioning Assessment Short Test (FAST)⁵⁶

This was developed in 2007 to evaluate the main difficulties of psychosocial functioning in the psychiatric population. It evaluates 6 areas: *autonomy, occupational functioning, cognitive functioning, finances, interpersonal relationships and leisure*. The subject's functioning in the previous 2 weeks (including limitations) should be assessed. This is of the observer report type and requires training for the evaluator. To obtain the results, each of the items is first evaluated with a Likert-type scale of 0 to 3 points (the greater the difficulty, the higher the score). Finally, the items are added together to obtain the overall performance score in each area⁵⁶.

UCSD Performance-Based Skills Assessment (UPSA)⁶⁶

Designed by California University to assess daily functioning in five areas: household, communication, finances, transportation and planning recreational activities. The Spanish version of the scale is called the UCSD Performance-Based Skills Assessment (Sp-UPSA)⁵⁷. It is based on the performance of a daily functional task, evaluated through role-play and skill demonstrations. Each of the 4 domains is scored from 0 to 25 points, with the total score corresponding to the sum of the 4 domains, between 0 and 100 points. Higher scores indicate better performance.

Table 1 shows a comparison of the main features of the instruments described according to the type of administration, time required, sample characteristics and training required by the evaluators.

Analysis of content

The analysis of the methodology used to validate the instrument in Spanish is shown next; including the theoretical framework, original language, translation and use of the *abilities and activities* concepts.

Regarding the **theoretical reference framework**, it was observed that BELS, LSP-20, ILSS, PSP, FAST and Sp-UPSA are not presented integrated in an approach that separates the activities of daily living and functioning concepts. Whereas, WHODAS 2.0 was developed from the dimensions of ICF⁶⁷.

Regarding the **original language**, all the analysed instruments were established in English, except FAST. In the BELS and WHODAS 2.0 adaptation studies, there is an adequate semantic definition of the items and their evaluation by a group of experts. Studies conducted with LSP-20, ILSS and PSP do not specify the strategy chosen to ensure conceptual equivalence between original and translated items. For Sp-UPSA, the domains or elements that were not applicable in Spain were culturally adapted. However, some such as *mobility/transport*, evaluated through *role-playing* of using the metro in a specific Spanish city, may limit the evaluation results if the evaluated subject is not familiar with this type of transport.

Another important aspect of the analysis is the **confusion of the concepts activities and abilities**. Some items of BELS, LSP-20, ILSS and FAST consider activities that are traditionally categorised as basic and instrumental, but include them in a category different from the traditional one. For example, item 20 of BELS, "*use of public facilities and services*" is included under *Household skills*; item 16 of LSP-20, "*What kind of work would you be able to do?*", is included in the *Self-care* category; ILSS items 1 and 2, "*washing clothes by hand or in the washing machine using the appropriate amount of detergent*" and "*drying clothes by hanging or using a tumble dryer*", are included in the *Appearance and Clothing* category; and FAST item 2, "*living on your own*", is included in the *Autonomy* factor, when it is intended to assess the ability of the subject to live alone without needing help from others by asking that subject.

WHODAS 2.0 performs a different categorisation based on the ICF dimensions. Table 2 compares the factors or categories and each instrument item with the basic core of the ICF and the traditional classification of activities of daily living⁴⁴.

In addition, most instruments classify some activities as basic or instrumental. However, the terms used to define

Table 1		Description of instruments					
Adaptation	Factors/ Evaluation domains	No ítems	Original language	Validation in other languages	Application type	Applica-tion time	Study evaluator training
BELS (Jiménez et al., 2000)	1. Self-care 2. Household skills 3. Community skills 4. Activity and relationships	26	English	Spanish ²²	Observer reporting	30-60 min	Handling of original questionnaires
LSP-20 (Burgés et al., 2007)	1. Therapeutic compliance 2. Social initiative 3. Self-care 4. Antisocial behaviour	20	English	Spanish ⁵¹ Italian ⁷¹ French ⁷²	Observer reporting	10 min	-----
ILSS (Martín Puer-ta,2018)	1. Appearance and clothing 2. Personal hygiene 3. Cleaning and organisation 4. Food handling 5. Health maintenance 6. Money management 7.Transport 8. Leisure and community 9. Job seeking 10. Job maintenance 11. Eating 12. Social relationships	102	English	Spanish ⁵³	Observer reporting	20-35 min	-----
PSP (García-Portilla et al.,2011)	1. Self-care 2. Regular social activities 3. Social and personal rela-tionships 4. Disruptive and aggressive behaviour	5	English	Spanish ⁵⁵ German ⁷³ Chinese ⁷⁴ Taiwanese ⁷⁵ Portuguese ⁷⁶	Observer reporting	10-30 min	Specific for PSP
FAST (Rosa et al.,2007)	1. Autonomy 2. Occupational functioning 3. Cognitive functioning 4. Financial aspects 5. Interpersonal relationships 6. Leisure	24	Spanish	Chinese ⁷⁷ Italian ⁷⁸ Finnish ⁷⁹ Turkish ⁸⁰	Observer reporting	10 min	Evaluation inter-viewing
WHODAS 2.0 (Vázquez-Barque-ro et al., 2000)	1. Cognition 2. Mobility 3. Self-care 4. Relationships 5. Housework, school and work life activities 6. Participation	36	English	47 languages in 27 study areas (40% in psychi-atry) ⁸¹	Observer reporting	20-30 min	Use of interview application manual
Sp-UPSA (García-Portilla et al.;2013)	1. Finance 2. Communication 3. Organisation / Planning 4. Mobility / Transport	40	English	Spanish (Europe) ⁵⁷ Portuguese (Brazil) ⁸² Korean ⁸³	Observer reporting	10-30 min	Task management manual

the domains are not the same in the different instruments (see table 2).

It is also observed that the wording of the items is sometimes ambiguous: for example, item 7 of LSP-20 ("*Is your personal appearance (facial appearance, gestures) generally appropriate to your surroundings?*") has 4 possible responses (exemplary or appropriate, slightly inappropriate, moderately appropriate or extremely inappropriate) that pertain to the concept of *activities of daily living*⁴⁴, and not to *ability*, as the instrument title indicates. This also occurs in BELS, where the very name of the instrument alludes to the *abilities of daily living*. However, the manual states "*it has been designed to assess the specific basic skills of daily coexistence*", "*its original objective is to assess changes in the performance of the abilities of daily living of people with long-standing mental disorder*"⁵². In other words, it was designed to assess basic skills, and its objective is closer to the concept of *activities of daily living*, when evaluating the way in which subjects perform an activity⁴⁴.

Regarding information on the application of the instrument, BELS and ILSS have no manual specifying how to obtain the total scores. This limitation may lead to errors in the correction and interpretation of the results. There is a manual for LSP-20, but it has not been translated from English to Spanish, which may hinder its proper application. Meanwhile, the PSP validity study explains the procedure for its application and WHODAS 2.0, FAST and Sp-UPSA have a manual for its application, correction and interpretation in Spanish.

Psychometric properties

Firstly, the *sample features* are analysed (see table 3). The ILSS adaptation study has the smallest sample ($n = 57$), followed by BELS with ($n = 77$), with PSP having the highest representation ($n = 320$). The diagnosis of schizophrenia is used for the PSP and WHODAS 2.0 samples, while BELS, ILSS, LSP-20 and Sp-UPSA include other types of diagnosis, albeit included within the framework of severe mental disorder. The FAST sample considers only bipolar disorder.

The age range is 18–86 years with an approximate mean age of 40 years for all instruments. Finally, the samples are mostly made up of men, except in the FAST adaptation, which has a majority of women.

Internal structure and validity of the instruments

All the studies show data of different significance except for BELS, which indicates the translation and inter-observer

reliability analysis as a method of adaptation and validity, without providing any data or analysis of criteria or construct validity³².

The LSP-20 study describes only a correlation with the PANSS scale (which assesses positive and negative symptoms), while the publications on PSP, FAST, WHODAS 2.0 and Sp-UPSA provide results for both content and criteria validity (FAST and WHODAS 2.0), as well as construct. Furthermore, relationships with other instruments that measure functioning were analysed for WHODAS 2.0, PSP, FAST and Sp-UPSA; such as GAF (Global Assessment of Functioning) and SOFAS (Social and Occupational Functioning Assessment Scale)^{57,61,68}. For ILSS, concurrent validity was determined by obtaining correlations with WHODAS.

Regarding the construct validity of LSP-20, the 4 instrument factors explain only 42.2% of the variance, and so should not be considered as acceptable, as it does not reach 50%. Also, in the LSP-20 adaptation study, the original instrument structure was not replicated, as the English version consists of 5 factors, while the Spanish adaptation proposes 4. This change was motivated because, when analysing the results of the graphical sedimentation analysis with 4, 5 and 6 factors, the adaptation authors considered a proposal of 4 made more clinical sense, and they removed the original *strange ideation* factor. This was achieved by transferring some items to the self-care factor and removing the rest.

Regarding reliability, the original studies reported internal consistency, response stability over time (test-retest) and agreement with the investigators^{32,69,70}. Tables 3 and 4 show the results observed in this area.

The instruments LSP-20, FAST, PSP, Sp-UPSA and WHODAS 2.0 show good internal consistency, with a Cronbach's alpha of 0.85, 0.90, 0.87, 0.90 and 0.94, respectively. For ILSS, internal consistency was calculated by domains only, and provided good to excellent results (Cronbach's alpha between 0.78 and 0.97). In addition, the study estimated inter-observer reliability via the correlation coefficient between the two groups, with results that ranged from moderate to strong (0.42–0.72).

The BELS adaptation study did not show internal consistency results, but gave adequate inter-observer reliability, with an average Kappa coefficient of 0.791 on the opportunity scale and 0.743 on the execution scale.

For LSP-20, the congruence between evaluators ranges from low to very high, with an average Kappa coefficient of 0.38–0.82 and weighted Kappa between moderate and very high (0.59–0.89).

Table 2 Conceptualisation: Activities of daily living vs Assessment domains

CIFF Basic Core Activities* (Gómez-Benito et al.,2018)	Classification of activities of daily living (Ayuso, 2007)	BELS (Jiménez et al., 2000)	LSP-20 (Burgés et al., 2007)	ILSS (Martin Puer-ta,2018)	FAST (Rosa et al.,2007)	PSP (García-Portilla et al.,2011)	WHODAS 2.0 (Vázquez-Barque-ro et al., 2000)	Sp-UPSA (García-Portilla et al.,2013)
Learning and application of knowledge <i>Acquisition of abilities; Focusing attention; Thinking; Reading; Solving problems; Taking decisions</i>	Basic	• Self-care	• Self-care	• Appearance and Dress	• Autonomy	• Self-care	• Cognition	• Finance
General tasks and demands Carrying out a single task; Carrying out multiple tasks; <i>Carrying out daily routines; Managing stress and other psychological demands</i>	• Feeding • Cleanliness • Bathroom • Dressing • Personal mobility • Sleeping and rest	• Household abilities • Community skills • Activities and Social Relationships	• Interpersonal social behaviour • Communication - Social contact • Non-personal social behaviour	• Personal hygiene • Cleaning and organisation • Food handling • Health maintenance	• Labour functioning • Cognitive functioning • Finance • Interpersonal relationships • Leisure	• Personal and Social relationships • Habitual social activities, including Work and Study • Disruptive and aggressive behaviour	• Mobility • Personal care • Relationships • Activities of daily living • Participation	• Communication • Organisation / Planning • Mobility / Transport
Communication Communication-reception of spoken messages; Communication-reception of non-verbal messages; Talking; Production of non-verbal messages; Conversation	Instrumental		• Autonomous living					
Mobility Use of means of transport; Driving	• Using different communication systems • Writing • Talking on phone • Community mobility (driving, using transport)			• Money management • Transport				
Self-care Washing; Body parts care; Dressing; <i>Taking care of own health</i>	• Maintenance of own health • Money management • Making purchases			• Leisure and Community • Job seeking				
Domestic living Obtaining a place to live; Obtaining goods and services; Preparing meals; Carrying out chores around the house; Caring for household objects; Helping others	• Establishment and care of the home • Caring for another • Use of safety and emergency response procedures			• Job maintenance • Eating • Social relationships				
Interaction and interpersonal relationships <i>Basic interpersonal interactions; Complex interpersonal interactions; Interacting with strangers; Formal relationships; Informal social relationships; Family relationships; Intimate relationships</i>								
Main areas of life School Education; Vocational training; Higher education; Apprenticeship (preparation for work); <i>Getting, keeping and leaving a job</i> ; Paid work; Unpaid work; Basic financial transactions; Complex financial transactions; Financial self-sufficiency								
Community, social and civic life <i>Community living; Free time and leisure; Religion and spirituality; Political life and citizenship</i>								

* Activities included in the Comprehensive ICF Core Set for Schizophrenia

** Activities in italics are part of the Brief ICF Core Set for Schizophrenia

Table 3		Validity				
Adaptation	Sample features	Concurrent validity	Construct validity			
			Sensitivity	Specificity	Factor Analysis	
BELS Jiménez et al., 2000)	n=77 Schizophrenia diagnosis 86.8% Average age 49 years	-----	-----			
LSP-20 (Burgés et al., 2007)	n=204 ----- diagnosis Average age 39.84; SD 12.05 Age range 18-67 years	-----	Correlation with original scale F1 0.90 ; F2 0.93; F3 0.87 y 0.79 F4 0.95; F5 0.14; F6 0.66	with PANSS Positive F1 (0.26-0.41) F2 (0.27-0.51) F3 (0.25-0.36) F4 (0.24-0.44)	with PANSS Article shows no data	4 factors explain 41.22% of variance
ILSS (Martín Puer- ta,2018)	n=57 Schizophrenia diagnosis 76.4% Bipolar disorder diagnosis 20.6% SD 10.23 Age range 20-63 years	with WHODAS 2.0 -0.62 (p<0.01) ; Highest correlation between "Food handling" from ILSS, and "Taking care of household responsibili- ties" from WHODAS 2.0	AV 0.58; HP 0.5; LO 0.60 MA 0.60; MS* 0.51; MD 0.51; T 0.4; OVC 0.40 BT 0.28; C 0.36; MT 0.39 RS 0.49			
PSP (García-Portilla et al.,2011)	Schizophrenia diagnosis (82.3%) (n=201) Average age 37.7, SD 11.8	-----		0.954 with SOFAS -0.878 with ICG-G Sensitivity 94.3%	Area under curve 0.986 (CI 95%. 0.9772- 0.9959) Specificity 96.1% Predictive values: Positive 98.7% Negative 83.9%	4 factors explain 73.2% of variance 2nd analysis 2 components 58.5% and 30.2% of variance
FAST (Rosa et al.,2007)	n=101; Bipolar disorder diagnosis; Average age 45 SD 13.66; Median 45.45 Age range 22-82 years	Very high significant correlation with GAF (r=-0.903; p<0.001)		Sensitivity 72%		
WHODAS 2.0 (Vázquez- Barquero et al., 2000)	n=352; Schizophrenia diagnosis; Average age 36.7 SD 8.27; Age range 18-55 years	with SOFAS r=-0.471 with ICG r= 0.436 with PANSS Negative r= 0.470		Area under curve 0.86 (CI 95% . 0.809- 0.917) Specificity 87%		
Sp-UPSA (García-Portilla et al., 2013)	n= 139; Schizophrenia diagnosis; n=57; Bipolar disorder diagnosis; n=31 Controls	-----	Correlation of total score with PSP 0.42 (p <0.0001) in schizo- phrenia 0.33 (p=0.070) in Bipolar 0.33 (p=0.070) in Con- trols with GAF 0.43 (p<0.0001). 0.52 (p<0.0001). 0.33 (p=0.070)	Sensitivity 82.5% Specificity 64.5% Predictive values: Positive 81.0% Negative 66.6%	Area under curve 0.89% (CI 95%. 0.77-0.93) Specificity 77.4% Predictive values: Positive: 94.3% Negative 50.0%	

AV. Appearance and Clothing; HP. Personal hygiene; LO. Cleaning and Organisation; MA. Food handling; MS. Health Maintenance; MD. Money management; T. Transportation; OVC. Leisure and Community; BT. Job Seeking; C. Eating. MT. Job maintenance; RS. Social relationships

Finally, a test-retest reliability of 0.74 was obtained in the Sp-UPSA, ranging between 0.66 in the highest domain (communication), and 0.44 in the lowest domain (transport).

The PSP, FAST, and WHODAS 2.0 studies showed an intraclass correlation (ICC) of 0.97, 0.98, and 0.92, respectively.

CONCLUSIONS

In the field of psychosocial rehabilitation, the use of adequate instruments to assess the level of functioning is essential, because the therapeutic objectives and planning of the intervention derive from their selection. Thus, the use of standardised instruments, supported by a model with good clinimetric properties is considered necessary. However, the use of instruments imported from countries and cultures different from where they are applied is very frequent. In general, this transfer consists of a simple translation, which has risks as it does not guarantee conceptual or cultural adaptation to the new environment, and may lead to inadequate results^{32,69}. Therefore, the work of adaptation of an instrument must be methodical and rigorous, meeting the requirements established in each adaptation phase^{32,69}.

Some instruments adapted to Spanish in this study related to the functioning of activities of daily living in people diagnosed with schizophrenia have been reviewed. This review work represents a great contribution to professionals in this field, as it provides Spanish versions of instruments imported from other languages and cultures. However, some deficiencies have been detected in the adaptation process, related to the original language and its translation, the confusion of concepts and the data provided for reliability and validity.

This review has investigated how some areas of psychosocial functioning of people with schizophrenia are being evaluated, showing that the conceptualisation and evaluation of functioning in this area is still a complex and controversial issue. Clearly, a consensus in the definition of the relevant terms would facilitate understanding among professionals. Thus, the WHO proposes to use the ICF, which understands functioning and disability as a human experience derived from the interaction of *Body Structures, Activities and Participation* (with their Capacity and Performance constructs), in addition to Environmental Factors. This approach can provide greater specificity to the recovery model and thus improve assessment and intervention.

In addition, few instruments specifically focus their attention on the area of activities of daily living. There is evidence of a lack of clarity in most regarding the terms and confusion between the concepts of *abilities and activities of daily living*. We found that some instruments take a large part of self-care and instrumental activities into account for the evaluation of ADLs in the field of psychosocial rehabilitation^{20,25}. Finally, there is also a shortage of instruments adapted to our cultural environment to adequately assess the activities of daily living in people with mental illness⁴⁸.

The creation of new instruments developed from an empirical approach, such as ICF, may be of great help in improving evaluation and, consequently, the intervention planning and psychosocial treatment of people diagnosed with a psychotic disorder.

CONFLICTS OF INTEREST

The authors declare they have no conflict of interest regarding the study carried out..

Table 4		Reliability		
Adaptation	Internal consistency	Inter-observers		Reliability Test-Retest
		Kappa	Weighted Kappa	Stability
BELS (Jiménez et al., 2000)	-----	Kappa Coefficient Average Value Opportunity scale 0.791 Execution scale 0.743		-----
LSP-20 (Burgés et al., 2007)	Cronbach's alpha α 0.85	n=30 0.38-0.82	n=30 0.59-0.89	-----
ILSS (Martín Puerta,2018)	Cronbach's alpha Appearance and clothing α 0.83-0.93 Personal hygiene α 0.85-0.96 Cleanliness/organisation α 0.92-0.94 Food handling α 0.94-0.95 Health maintenance α 0.77-0.85 Money management α 0.92 Transport α 0.81-0.77 Leisure and Community α 0.78-0.82 Job seeking α 0.94 Eating α 0.82-0.80 Job maintenance α 0.97-0.91 Social relationships α 0.90	Inter-observer correlation coefficient Appearance and clothing 0.46 Personal hygiene 0.46 Cleanliness and organisation 0.55 Food handling 0.51 Health maintenance 0.42 Money management 0.65 Transport 0.70 Leisure and Community 0.59 Job seeking 0.72 Eating --- Job maintenance --- Social relationships ---		-----
PSP (García-Portilla et al.,2011)	Cronbach's alpha α 0.874	-----	-----	Intra class correlation (ICC) 0.979 CI 95% (0.969-0.986)
FAST (Rosa et al.,2007)	Cronbach's alpha α 0.90	-----	-----	Intra class correlation (FAST) 0.98 (GAF) 0.95 (HDRS) 0.87 (YMRS)0.93
WHODAS 2.0 (Vázquez-Barquero et al., 2000)	Cronbach's alpha α 0.94	-----	-----	Intra class correlation (ICC) 0.92
Sp-UPSA (García-Portilla et al., 2013)	Cronbach's alpha A 0.814	-----	-----	

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