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Cultural Adaptation and Psychometric Properties of the Portuguese Version of the Therapeutic Self-Care Scale

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Abstract

Background: Self-care is a nursing sensitive outcome. In Portugal there is a lack of validated scales to assess self-care. Scales have their own validation methods to be used in cultural contexts which are different from their original contexts.
Aim: To translate, adapt, validate, and assess the psychometric properties of the Therapeutic Self-Care Scale (Doran & Sidani, 2005) for the Portuguese population.
Methodology: A cross-sectional study was carried out on a sample of 990 inpatients in surgical and medical wards in 4 hospitals of the central region of Portugal. The Therapeutic Self-Care Scale was administered by nurses in interview format between March and July 2012. This scale measures the patient's ability to perform 4 different categories of self-care activities.
Results: n=990; mean age=63.57 years, and SD=17.14. Keiser-Meyer-Olkin (KMO) =0.948, Bartlett's Test of Sphericity: $p < 0.001$. The principal component analysis concluded on a one-dimensional structure, in which a single factor explained 81.318 of the total variance. Internal validity: Cronbach' $\alpha = 0.979$.
Conclusions: The Therapeutic Self-care Scale showed valid psychometric properties making it suitable for the Portuguese population.

Key-words: Self-care; Scales; Validation

Introduction

The study of the impact of nursing interventions and outcomes on individuals is an important source of evidence concerning the effectiveness of care. One of nursing sensitive outcomes is self-care, particularly because of patients' ability to be responsible for managing their own disease and caring for themselves, and also because of the potential to improve the quality of life for individuals, families and communities (Sidani, 2011; Taylor & Renpenning, 2011).

One of the fundamentals of nursing is self-care (Taylor & Renpenning, 2011). It is the fundamental principle underlying nurses' interventions independently and in collaboration with other health professionals (Sidani, 2011). The increase of costs in health care services and providers' training is a push towards self-care.

Taking into account that the patient's responses to illness are a highly sensitive focus of attention of nursing care, nurses should professionalize their contribution in this area so that patients are capable of understanding how nursing care

translate into health gains, acknowledging them as a resource for therapeutic self-care (Orem, 2001).

In Portugal, there is a clear lack of tools to measure therapeutic self-care. Despite the fact that the sustainability of health systems largely depends on nurses' decision-making and on self-care being a fundamental area of study in nursing, there is still need for reliable and valid measures which contribute to an intentional, systemized and professionalized intervention.

The measurement of nursing outcomes, which reflects the changes in self-care, is the focus of this study. The aims of this research were: to translate and adapt the Therapeutic Self-care Scale (TSC) for the Portuguese population; to assess the psychometric properties of the Portuguese version using an internal consistency indicator; and to validate the scale's construct using the principal component analysis.

Theoretical framework

Self-care has received considerable attention by the scientific community. The explicit relationship between nursing and self-care was first presented by Orem. It is a complex construct and it is a human regulatory function that one must perform in the interest of life, health and well-being (Taylor & Renpenning, 2011).

According to Orem (2001), self-care is the action of people who have developed or are developing the power and the ability to use appropriate, reliable and valid measures to regulate their own functioning and development in stable or changing environments. Self-care is the practice of activities that individuals initiate and continue on their behalf in maintaining life, health and well-being, albeit not necessarily alone (Orem, 2001).

Self-care is the deliberate use of valid means to control or regulate internal and external factors that affect the smooth activity of the persons' own functional and developmental processes or contribute to a person's personal well-being. It is an action with a sequence and pattern and, when performed effectively, it contributes in a specific way to human structural integrity, human functioning, and human development (Orem, 2001).

Self-care has a purpose, and the actions are performed by the individual or others with an intention (Orem, 2001; Taylor & Renpenning, 2011). Therapeutic self-care is, thus, based on a deliberate action performed by the individual based on their judgment about what is appropriate under existing conditions or circumstances. The phases of deliberate action are processes named operations with the goal of meeting self-care requisites. Within deliberate action, there are three types of operations: estimative operations (to know self-care requisites and means of meeting them), transitional operations (to make judgements and decisions about self-care), and productive operations (to perform actions to meet self-care demands) (Taylor & Renpenning, 2011).

The totality of requisites is known as the Therapeutic Self-care Demand (Taylor & Renpenning, 2011). The therapeutic self-care demand is a conceptual construction that represents the operations or the sequence of necessary actions to meet not only a formalized and specific requisite of self-care, but also the requisites to be met by or for a person during a specific time period, using valid and interrelated methods and operations (Orem, 2001; Taylor & Renpenning, 2011).

In line with this ideology, therapeutic self-care is the patients' ability to manage their health conditions after discharge from hospital. It includes the ability to recognize and manage symptoms such as pain, to take the prescribed medications, to perform regular activities such as activities of daily living, and manage changes in condition (Doran et al., 2006).

A contemporary view of self-care positions it within a conceptual framework that supports the project of healthcare services and particularly the interventions designed by nurses to help people manage their health condition in different settings and preserve their level of functioning (Meleis, 2012; Sidani, 2011). This is a key component of the models of assistance for chronic diseases which lead to the same conclusion, i.e. they promote patients' "empowerment and acquisition of self-management skills" (Meleis, 2012).

Based on these statements, patients are called in to assume primary responsibility for addressing the self-care demands, carrying out the therapeutic regimen on a long-term basis, and identifying and effectively managing the alterations in their condition (Sidani, 2011). This

leads to significant cost-savings and increases in the effectiveness of health interventions that are attributable to low-cost interventions with a high cost-benefit ratio (World Health Organization, 2003).

Therapeutic self-care is related to the concept of treatment adherence, both being priority phenomena of people's health that intertwine and are interdependent, thus representing an important indicator of health care effectiveness (World Health Organization, 2003).

The management of the therapeutic regimen is, therefore, a focus of nursing practice, and it is defined by the International Council of Nurses (2013) as: *Self-initiated action to promote wellness, recovery and rehabilitation, following directions without deviation, devoted to a set of actions or behaviours. Compliant with treatment regimen, taking medicine as instructed, behaviour change for the better, signs of healing, collection of medicine on due date, internalisation of the value of health care behaviour and obeying instructions regarding treatment.*

The World Health Organization (2003) described therapeutic adherence as an active, responsible and flexible process, in which the patient strives to achieve good health by working in close collaboration with health care staff, instead of simply following rigidly prescribed rules. This concept gravitates around the acknowledgement that it is an active and voluntary involvement of the patient in the management of his or her disease, by following a mutually agreed course of treatment and sharing responsibility with the health care providers.

Nurses have a clear significant role in assessing the risk of non-adherence and in designing the interventions to optimize it. A stronger commitment to a multidisciplinary approach is needed to obtain measurable results, requiring coordinated action from health professionals, researchers, health planners and policy-makers (World Health Organization, 2003).

However, self-care, which comprises the concept of the person's autonomy, not only included the activities performed by the individual, but also the individuals who support the accomplishment of self-care to the person's benefit. The science of self-care necessarily implies the person's ability to engage in deliberate action. This ability or potential is defined as agency. In self-care, the essential is identified as the therapeutic self-care demand and the resource as the self-care agency (Taylor & Renpenning, 2011).

Self-care agency is the persons' ability to know and meet their continuing requirements for self-care in order to regulate their own human functioning and development (Taylor & Renpenning, 2011).

This perspective elects nursing care as therapeutic self-care and implies that nurses are self-care agents who provide intentional care to people whose self-care requisites exceed their self-care capabilities (Orem, 2001). Their actions need to be coordinated, performed simultaneously, or related; and the self-care agent (the person performing the action) should have a wide knowledge and awareness of the situation: the agent reflects on and mobilizes that knowledge for decision-making that meet individuals' self-care needs (Meleis, 2012, Orem, 2001).

In institutional settings, one of the nurse's focuses of attention are the needs of the individual and of the family/care provider at the moment of the patient's return home, and the nurse's intervention has a direct impact on the ability to manage therapeutic self-care at discharge (Doran et al., 2006). Therefore, the better prepared self-care agents are to meet the health challenges of the dependent person, the better results they will obtain (Petronilho, 2012).

Moreover, self-care represents the theoretical base for psycho-educational, cognitive and behavioural interventions that involve planning learning activities with a view to increasing the capacity of the person towards the need to develop decision-making (Sidani, 2011) and prevent rupture situations that lead to recurrent hospitalizations of the dependent person. Hospital readmissions are an indicator of how therapeutic self-care is managed either when this management is done by the individual or when health care are provided by family members (Sidani, 2011).

One of the interventions with the greatest potential in terms of outcomes is the Therapeutic Education of the patient/family or the education for the self-management of the health care process. According to the World Health Organization (2007), therapeutic patient

education is a process of empowerment of the person and/or other people for managing life with a chronic illness, based on a set of integrated and organized actions, including psychosocial support, designed to make people and family members more autonomous by acquiring knowledge and skills to make them agents of their own change, thus improving their well-being and quality of life World Health Organization (2007).

The assessment of nursing care outcomes that reflect changes in self-care is the emphasis on which rests the measurement of return on nurses' investment. In Portugal there are no tools to assess therapeutic self-care, therefore, we felt the need to translate and validate an assessment tool for the Portuguese population. We chose the Therapeutic Self-care Scale (TSC), developed by Doran and Sidani in 2005, because it is a robust and easy-to-apply scale.

This scale has been widely used by its authors in different studies that relate variables to other outcomes. According to the authors, the scale has a strong internal consistency: Cronbach's -α 0.93 (Doran et al., 2006). This research will provide the basis to assess self-care outcomes and describe the validation process of the Therapeutic Self-care Scale, as well as its psychometric properties.

Methodology

We conducted the cultural adaptation and validation of the TSC for the Portuguese population through a cross-sectional study in a sample of adult patients with acute illness, hospitalized in 4 hospitals of the centre region of Portugal.

The TSC is a tool to assess therapeutic self-care which was developed in 2005 by Diane Doran and Soraya Sidani, researchers at the University of Toronto, Canada. It includes 12 questions asking participants to answer on a *Likert*-type scale between 0 and 5 in which 0 corresponds to "*No" and 5 "Yes"* regarding the level of knowledge on a set of situations related to therapeutic self-care management. The TSC total score (60 points) corresponds to a high level of performance in therapeutic self-care. The scale is designed to assess patients' ability to engage in four aspects of self-care: taking medications as prescribed by the doctor; identifying and managing symptoms; performing activities of daily living; and managing changes in condition.

The scale should be applied by nurses in interviews. Nurses can ask the patient or some significant person to answer the questions. If a family member performs an activity that should be performed by the patient, this situation should be registered in the patient's records. The patient's answers are indicators of the need for knowledge or resources. The answers may not reflect what the nurse believes to have been taught, but reflect the patient's understanding of what was taught.

In the translation and cultural adaptation process of the scale for the Portuguese population, we decided to follow the guidelines proposed by Streiner & Norman (2003) and Acquadro et al. (2004). We started by contacting the authors to request their permission to adapt and translate the scale. The application of questionnaires to populations with a different language to those for which the questionnaires were originally developed raises questions raises concerns for the researcher. The first concern relates to the translation, whose goal is to obtain equivalence between the original instrument and the version for validation. For this reason, it is essential to establish a conceptual equivalence, i.e. to examine if the construct referred to in the instrument is understood, and if it makes sense in the language to which we are validating it.

On the other hand, the relevance of each item to the construct and the context where the instrument will be applied, together with its semantic equivalence, meaning, and operational equivalence (how the instrument will be presented and used) are essential aspects in validating a scale (idem).

After permission was granted by the authors, we gathered a panel of experts, consisting of nurses, masters' students and nursing teachers to discuss the relevance of the concept and identify the conceptual equivalence. After consensus on the cultural equivalence of this concept was obtained, we started the translation and cultural adaptation of the instrument (Acquadro et al., 2004; Streiner & Norman, 2003).

We used the methodology of translation/back-translation and discussion by experts proposed by Streiner & Norman, (2003).

The authors mentioned that, after determining that it is possible to translate the instrument because there is an equivalent concept or because it makes sense, it is important to conduct two independent translations, taking into account the purpose and meaning of each item, which will allow the use of idiomatic expressions that clarify the item or question (Acquadro et al., 2004, Sapountzi-Krepia et al., 20009a, Sapountzi-Krepia et a.l, 20009b).

The original version was translated by two Portuguese professional bilingual translators, from English into Portuguese. The two versions were compared to evaluate its semantic and cultural equivalence. This task was carried out in collaboration with five nursing teachers chosen through convenience sampling and with strong experience in research.

After a thorough analysis of both versions, which were very similar, we reached a consensual version. According to Streiner & Norman (2003) and Wild et al., (2005) the next step to obtain a consensual translation is its back-translation, which should be performed by an independent translator who is not familiar with the original instrument. After identifying differences between both versions through comparative analysis, we obtained a scale ready to be applied. After its psychometric evaluation, we obtained a final version (Sapountzi-Krepia et al., 2005; Uysal, Enç, 2012; Theofilou et al., 2012; Amaral et al., 2012, 2014; Vasiliou, Kouta & Raftopoulos, 2013).

The final version was then back-translated into English by a bilingual translator, with English as mother tongue, independent of the first translators. This back-translation was considered equivalent by the initial translators. This process resulted in the final version of the instrument to be applied to the sample population. The final version was then submitted to the original author who agreed with it and considered that the concept of the initial instrument remained unchanged.

This study was carried out on a convenience sample of 990 patients. Participants were selected based on previously defined eligibility criteria. All participants were adults, aged >18 years, with more than three days of hospitalization, who knew how to read and write in Portuguese, without mental disorders and who consented to participate in this study. The sample size followed the recommendations to carry out the statistical analysis. The study was carried out in four hospitals of the central region of Portugal, in 28 surgery and medicine units. First, permission was obtained from the boards of directors and ethics committees of the hospitals. The request for permission included a guide of informed consent to be distributed to the participants who were informed about the study objectives, its voluntary nature, and the assurance of anonymity and data confidentiality.

The ethical principles that should guide a research study were followed in every phase of the study. It was approved by the ethics committee, a formal permission to use the instrument was obtained, and every participant had access to information in an explanatory letter of informed consent and signed the informed consent. Participants were also informed about the scope, objectives, procedures, risks, benefits, alternatives, the assurance of confidentiality and the voluntary nature of participation in accordance with the principles of Declaration of Helsinki (World Medical Association, 2008). Participants were informed that they had the right to withdraw from the study at any time, without any impact on their present and future treatment. The researchers were available to clarify any doubts.

The scale was applied in interviews by nurses from the wards where the study was conducted. The nurses received training on the study objectives, the instructions to use the instrument, in particular its application after obtaining informed consent at the time of hospital discharge, and also the inclusion and exclusion criteria. The completed questionnaires were placed in a closed box, which was only opened by the research team at the end of each week. Data collection was carried out between March and July 2012. Statistical analysis, using SPSS, version 19.0 for Windows, consisted of correlations, internal consistency using Cronbach's alpha, and factor analysis using the principal components method with Varimax rotation to test the construct's validity. Reliability was assessed using Cronbach's alpha and through analysis of the scale items Waltz et al., 2005). These measures were used to determine the psychometric properties of the scale, as presented ahead. For internal consistency, Cronbach's alpha

values greater than 0.70 were considered acceptable (Jacobson, 1997). Compliance was assessed using the standard scores starting with the answers which were not filled out by the participants. This analysis allows suggesting a greater or lesser level of acceptance by the respondents for completing the instrument. Before the factor analysis, we measured the Keiser-Meyer-Olkin (KMO) value and performed the Bartlett's test of Sphericity. According to Maroco (2007), values greater than 0.80 are considered good. As for the number of factors to be extracted, we used the eigenvalue extraction method. In factor analysis, the concepts involved in each item were also analysed so as to maximize the interpretation of the factors.

Results

The sample was composed of 990 individuals, and the mean age was 63.57 years, with a standard deviation of 17.41, about gender 53.7% are male and 46.3% are female, they are mostly married (58.3%) (Table 1).As shown in table 2, the KMO value was 0.948 and the Bartlett's Test of Sphericity was $p<0.001$ (Table 2), which allow us to proceed with the factorial analysis.

Table1. Sample distribution

Age	mean	63.57
	Stand deviation	17.41
gender	male	53.7
	female	46.3
Marital status	single	12,4
	married	58.3
	partner	1.5
	Widow	24.4
	divorced	3.4

Table2. Descriptive statistics

	N	Min.	Máx.	Mean	Stand deviation	KMO/ Bartlett's Test of Sphericity
1. Do you know which medicines you have to take?	988	0	5	3.48	1.735	0.948 p<0.001
2. Do you know what the prescribed medicines do (that is, do you know what effect the medicines have on your state of health).	988	0	5	3.15	1.684	
3. Are you able to take the medication in the way that was prescribed to you?	988	0	5	3.57	1.702	
4. Do you manage to identify changes in your body (symptoms) related to your illness or your state of health?	986	0	5	3.20	1.538	
5- Do you know the reason why you suffer some changes in your body (symptoms) related to your illness or state of health?	990	0	5	2.89	1.582	
6- Do you know and understand what you should do (things or activities) to control these changes in your body (symptoms)?	988	0	5	2.87	1.570	
7- Are you able to carry out the recommended treatments or activities in order to manage these changes in your body (symptoms)?	988	0	5	3.18	1.622	
8- Are you able to do things or activities to care for yourself and maintain your health generally?	989	0	5	3.32	1.619	
9- Do you know who you should contact to ask for help to carry out your daily activities?	990	0	5	3.69	1.502	
10- Do you know who you should contact in the event of a medical emergency?	987	0	5	3.68	1.548	
11- Are you able to carry out normal activities (such as having a bath, going shopping, preparing meals, visiting friends)?	989	0	5	3.25	1.826	
12- Are you capable of adjusting your normal activities when you experience changes in your body (symptoms) related to your illness or state of health?	988	0	5	3.14	1.682	
ACT Total	973	.00	60.00	39.4337	17.70282	

The principal component analysis resulted in a single factor solution, with an eigenvalue greater than 1, which explained 81.318 % of the variance (Table 3).

Table3. Variance Explained

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1- Do you know which medicines you have to take?	9.758	81.318	81.318	9.758	81.318	81.318
2- Do you know what the prescribed medicines do (that is, do you know what effect the medicines have on your state of health).	.544	4.535	85.853			
3- Are you able to take the medication in the way that was prescribed to you?	.400	3.331	89.184			
4- Do you manage to identify changes in your body (symptoms) related to your illness or your state of health?	.361	3.006	92.190			
5- Do you know the reason why you suffer some changes in your body (symptoms) related to your illness or state of health?	.204	1.700	93.890			
6- Do you know and understand what you should do (things or activities) to control these changes in your body (symptoms)?	.162	1.353	95.243			
7- Are you able to carry out the recommended treatments or activities in order to manage these changes in your body (symptoms)?	.137	1.142	96.385			
8- Are you able to do things or activities to care for yourself and maintain your health generally?	.111	.929	97.314			
9- Do you know who you should contact to ask for help to carry out your daily activities?	.098	.813	98.127			
10- Do you know who you should contact in the event of a medical emergency?	.090	.748	98.875			
11- Are you able to carry out normal activities (such as having a bath, going shopping, preparing meals, visiting friends)?	.078	.647	99.522			
12- Are you capable of adjusting your normal activities when you experience changes in your body (symptoms) related to your illness or state of health?	.057	.478	100.000			

Extraction Method: Principal Component Analysis.

The response rate was measured by the missing values per item. It ranged between 99.6% for item 4 (*Do you manage to identify changes in your body (symptoms) related to your illness or your state of health?*) and 100% for items 5 and 9 (*Do you know the reason why you suffer some changes in your body (symptoms) related to your illness or state of health?; Do you know who you should contact to ask for help to carry out your daily activities?*) (Table 4).

Table 4. Relative weighting factor of each item

Component Matrix[a]

	Component
	1
8. Are you able to do things or activities to care for yourself and maintain your health generally?	.936
7. Are you able to carry out the recommended treatments or activities in order to manage these changes in your body (symptoms)?	.932
3. Are you able to take the medication in the way that was prescribed to you?	.919
1. Do you know which medicines you have to take?	.912
12. Are you capable of adjusting your normal activities when you experience changes in your body (symptoms) related to your illness or state of health?	.903
9. Do you know who you should contact to ask for help to carry out your daily activities?	.899
2. Do you know what the prescribed medicines do (that is, do you know what effect the medicines have on your state of health)	.896
10. Do you know who you should contact in the event of a medical emergency?	.893
4. Do you manage to identify changes in your body (symptoms) related to your illness or your state of health?	.889
6. Do you know and understand what you should do (things or activities) to control these changes in your body (symptoms)?	.885
11. Are you able to carry out normal activities (such as having a bath, going shopping, preparing meals, visiting friends)?	.859
5. Do you know the reason why you suffer some changes in your body (symptoms) related to your illness or state of health?	.856

Extraction Method: Principal Component Analysis.

a. 1 component extracted.

The items have a higher predictive value when together, because when together, they explain 81.318% of the variance, and have great reliability, that is, when the 12 items are considered together, they contribute significantly for determining a single factor.

Reliability was assessed through internal consistency and a Cronbach's alpha of 0.979 was obtained, which is considered excellent, according to Maroco (2007).

Discussion

The methodological process of semantic consensus was fluid and there was consistency between the experts on the concept to be used in the cultural context. We highlight the relevance of the study because of the number of individuals included, i.e. a large sample size gives more consistency to the results.

The scale showed a very high internal consistency (Cronbach's alpha of 0.979), which is in line with Acquadro et al., (2004) and Streiner & Norman (2003). On the other hand, the factor analysis showed a factor with an eigenvalue higher than 1, which explained 81.318 % of the variance. An average inter-item correlation of 0.796 and an item-total correlation of 0.861-0.93 were obtained (Table 5).

The original instrument was designed based on four areas, and the items cover the wide range of issues related to self-care. In the version validated for the Portuguese population, they are also associated to the self-care item instead of being autonomous.

In the single factor solution, the areas suggested by the authors for the Canadian population were also not consistent with our population, at least in the case of the 990 study participants who apparently also valued therapeutic self-care as a whole.

The perception of self-care for this population is much closer to autonomization and to viewing it as a whole, instead of dividing it by specific and concrete skills in several areas. This idea is similar to Orem's perspective that self-care is a global and integrated approach that is reflected in the empowerment and the acquisition of self-management skills However, we believe that there are some limitations. During the application of this scale, we realized that the lack of an answer choice "not applicable" may have conditioned some participants to answer, for example, to questions associated with therapeutic regimen management when they are not taking any medication.

Table5. Inter-item correlation

ITENS	1	2	3	4	5	6	7	8	9	10	11	12
1	1	0.895	0.927	0.759	0.727	0.756	0.825	0.844	0.795	0.797	0.768	0.787
2	0.895	1	0.846	0.780	0.764	0.791	0.817	0.814	0.751	0.765	0.733	0.765
3	0.927	0.846	1	0.771	0.721	0.743	0.846	0.865	0.832	0.832	0.785	0.799
4	0.759	0.780	0.771	1	0.841	0.840	0.815	0.788	0.800	0.773	0.708	0.775
5	0.727	0.764	0.721	0.841	1	0.872	0.722	0.746	0.722	0.728	0.668	0.751
6	0.756	0.791	0.743	0.840	0.870	1	0.851	0.801	0.752	0.745	0.707	0.775
7	0.825	0.817	0.846	0.815	0.780	0.851	1	0.903	0.819	0.802	0.787	0.841
8	0.844	0.814	0.865	0.788	0.746	0.801	0.903	1	0.852	0.826	0.828	0.861
9	0.795	0.751	0.832	0.800	0.872	0.752	0.819	0.853	1	0.899	0.743	0.789
10	0.797	0.765	0.823	0.773	0.728	0.745	0.802	0.826	0.899	1	0.748	0.777
11	0.768	0.733	0.785	0.708	0.668	0.707	0.787	0.828	0.743	0.748	1	0.892
12	0.787	0.765	0.799	0.775	0.757	0.775	0.841	0.861	0.789	0.777	0.892	1

	mean	**mín.**	**máx.**	**average**	**máx./ mín.**	**variance**	**N of itens**
Inter-item correlation	0.796	0.668	0.927	0.259	1.387	0.003	12

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For future studies, this scale should be applied at two different points in time, at the moment of admission and discharge, so as to validate the therapeutic regimen management in case of chronic diseases.

Conclusions

The therapeutic self-care scale is a measure of one of the most sensitive focus of nursing autonomous practice and it allows expressing intention in prescribing interventions. The lack of tools to assess therapeutic self-care in Portugal is a factor that limits the objectivity of an evidence-based practice.

Based on our analysis, the TSC scale showed good psychometric properties, as well as high adherence levels, confirming its applicability in clinical practice and in research. In clinical practice it can be an essential tool to assess the acquisition of therapeutic self-care skills since it was easy and quick to apply. To sum up, we verified that cultural adaptation is possible, based on the consensus among translators, back-translators and original authors and on the respondents' adherence.

The Portuguese version of the scale shows very good internal consistency (Cronbach's alpha=0.979) and a great single factor validation. The single factor found in the Portuguese version, with high variance, bring therapeutic self-care closer to the original ideas of Orem, particularly in terms of the theory or sub-theory

of support and education measures, which encompasses a much wider and a less fragmented view of the acquisition of skills, as in the original version of the instrument.

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