

Original Article

Henriques SH, Chaves LDP, Brito LJS, Mello AL, Silva BR, Leal LA

Transcultural adaptation of the Competency Evaluation Questionnaire - Brazilian version

Rev Gaúcha Enferm. 2019;40:e20180155

doi: <https://doi.org/10.1590/1983-1447.2019.20180155>

## Transcultural adaptation of the Competency Evaluation Questionnaire - Brazilian version

Adaptação transcultural do Competency Evaluation Questionnaire - versão brasileira

Adaptación transcultural del Competency Evaluation Questionnaire - versión brasileña

Silvia Helena Henriques<sup>a</sup>

Lucieli Dias Pedreschi Chaves<sup>a</sup>

Lana Jocasta de Souza Brito<sup>a</sup>

Amanda de Lemos Mello<sup>b</sup>

Beatriz Regina da Silva<sup>a</sup>

Laura Andrian Leal<sup>a</sup>

### How to cite this article:

Henriques SH, Chaves LDP, Brito LJS, Mello AL, Silva BR, Leal LA. Transcultural adaptation of the Competency Evaluation Questionnaire - Brazilian version. Rev Gaúcha Enferm. 2019;40:e20180155. doi: <https://doi.org/10.1590/1983-1447.2019.20180155>.

### ABSTRACT

**Objective:** Describe the process of translation and adaptation to Brazilian culture of the Competency Evaluation Questionnaire for hospital nurses.

**Method:** Methodological study of translation and cross-cultural adaptation, including the steps translation of the original instrument into Portuguese, consensual evaluation of translated versions, back - translation, validation by judges and pilot with 29 hospital nurses.

**Results:** They presented the stages of process of cross-cultural adaptation of the instrument, with adjustments proposed by a Judges Committee, composed of 27 items distributed in five domains of competencies for hospital nurses. The instrument adapted to Portuguese presented semantic, idiomatic, experimental and conceptual equivalence with the original, and the total value of the Cronbach Alpha 0.932, in addition to the relative validation.

**Conclusions:** The Competency Evaluation Questionnaire has been shown to be a reliable instrument that can be used but does not exclude the need for future statistical tests aiming at psychometric validity.

**Keywords:** Nurses. Hospitals. Professional competence. Translating.

---

<sup>a</sup> Universidade de São Paulo (USP), Escola de Enfermagem de Ribeirão Preto, Departamento de Enfermagem Geral e Especializada. Ribeirão Preto, São Paulo, Brasil.

<sup>b</sup> Universidade Federal de Santa Maria (UFSM), Departamento de Enfermagem. Santa Maria, Rio Grande do Sul, Brasil.

**RESUMO**

**Objetivo:** Descrever o processo de tradução e adaptação para a cultura brasileira do Competency Evaluation Questionnaire para enfermeiros hospitalares.

**Métodos:** Estudo metodológico de tradução e adaptação transcultural, compreendendo as etapas 'tradução do instrumento original para o português do Brasil', 'avaliação consensual das versões traduzidas', 'retrotradução', 'validação por juízes' e 'piloto com 29 enfermeiros hospitalares do interior paulista', ocorrido em 2016.

**Resultados:** Apresentaram as etapas do processo de adaptação transcultural do instrumento, com ajustes propostos por um Comitê de juízes, composto por 27 itens distribuídos em cinco domínios de competências para enfermeiros hospitalares. O instrumento adaptado para o português apresentou equivalência semântica, idiomática, experimental e conceitual com o original, e valor total do Alpha de Cronbach 0,932, além da validação parente.

**Conclusões:** O Competency Evaluation Questionnaire demonstrou ser um instrumento confiável, possível de ser utilizado, mas não exclui a necessidade de futuros testes estatísticos visando à validade psicométrica.

**Palavras-chave:** Enfermeiras e enfermeiros. Hospitais. Competência profissional. Tradução.

**RESUMEN**

**Objetivo:** Describir el proceso de traducción y adaptación a la cultura brasileña de la encuesta evaluativa de competencias para enfermeros en hospitales.

**Métodos:** Estudio metodológico sobre la traducción y adaptación cultural, que comprende la traducción del instrumento al portugués, la evaluación consensuada de las versiones traducidas, la retro-traducción, la traducción de validación por los jueces y un piloto con 29 enfermeras del hospital, que se produjo en 2016.

**Resultados:** Se presentaron las etapas del proceso de adaptación transcultural, con ajustes propuestos por un comité de jueces, compuesto por 27 ítems distribuidos en cinco dominios de competencias para enfermeros de hospitales. El instrumento adaptado demostró equivalencia semántica, idiomática, experimental y conceptual al original, y cantidad total de alpha de Cronbach de 0,932, además de una validación relativa.

**Conclusiones:** La Competency Evaluation Questionnaire demostró ser un instrumento confiable, posible de ser utilizado, pero no excluye la necesidad de futuras pruebas estadística con el objetivo de lograr una validez psicométrica.

**Palabras clave:** Enfermeros. Hospitales. Competencia profesional. Traducción.

**INTRODUCTION**

When managing people, companies and/or managers must provide conditions so that individual competencies can be used by the organization. Therefore, the performance evaluation by competencies is a people management strategy that can help in the diagnosis of workers' potential and improve their performance. To this end, it is important not only to adopt technical-professional knowledge, but also to mobilize individuals and the organization to deal with problems in daily work<sup>(1)</sup>.

In the hospital setting, the theme of "professional competence" has been the focus of attention of hospital administrators, as well as nurses. In their work process, the nurses have

taken care of the most serious patients, developing in a shared way care and management activities<sup>(2)</sup>, requiring specific professional skills in order to guarantee quality in the care provided.

In this way, competences represent a set of knowledge, skills and attitudes that each worker has and that serves as a reference for building their development in the company<sup>(1)</sup>. In this sense, skills are specific results that individuals bring to the exercise of their work activities, therefore, they can be observable through the performance of the professional at work<sup>(3)</sup>.

The literature reveals that many researchers have been concerned with this issue and developed instruments to evaluate the competencies of nurses through their performance, both in the Public Health area<sup>(4-5)</sup> as of the hospital area<sup>(6-7)</sup>. In this perspective, the *Competency Evaluation Questionnaire* (CEQ) is a tool built to evaluate the skills of hospital nurses, which used statements from evaluation instruments of public and private teaching hospitals. The authors of the CEQ performed the semantic validation, cultural adaptation in the English language and pilot assuring the internal consistency of the items with *Alpha by Cronbach*=0,97<sup>(6)</sup>.

In the mentioned instrument they included items of competences that reflected high importance for the practice of nurses in all areas of work. The CEQ items reveal universal standards of American Nurses' Association (ANA), Nursing and Midwifery Council (NMC) and the International Council of Nurses (ICN), and present competency statements distributed in five domains, among them: management, professionalism, problem solving, nursing process and knowledge of basic nursing principles<sup>(6)</sup>. The CEQ is a Likert scale and respondents should manifest themselves by adding values from 1 to 5, where 1 = low competence and 5 = high competence.

In Brazil, there were no published studies that used quantitative tools to evaluate the skills of hospital nurses. In this perspective, researchers have preferred to translate instruments already available in other languages, rather than to create new instruments, since such a procedure can contribute to aspects of scientific relevance, such as cross-cultural studies<sup>(8)</sup>. Thus, in view of the above, the following guiding question is presented: How to proceed to the translation into the Portuguese language and cross-cultural adaptation of an instrument that evaluates the competences of Brazilian hospital nurses?

Thus, this study aims to describe the process of translation and adaptation to Brazilian culture of the Competency Evaluation Questionnaire for hospital nurses.

## **METHODS**

This is a methodological study whose proposal was to adapt culturally to Portuguese (Brazil) an instrument that evaluates competencies in hospital nurses. First, we obtained an electronic authorization with the authors responsible for CEQ for translation and adaptation in Brazil<sup>(6)</sup>, besides the use and application of later psychometric tests.

The cross-cultural adaptation of an instrument involves the implementation of two stages: translation of the instrument and its adaptation to the culture in which it is intended to be used<sup>(9)</sup>. In this way, a very employed approach and methodological reference in this study presents the following sequence: translation, retro-translation, technical revision of the translated version by committee of judges and pilot<sup>(10)</sup>. In the pilot was the participation of 29 nurses who worked in hospital units of a large public Hospital in the interior of the State of São Paulo, randomly chosen to be available to participate in the research. Data collection of this stage was carried out from July to October 2016.

The research was approved by the Research Ethics Committee of the University of São Paulo at Ribeirão Preto College of Nursing, CAAE: 38544414.9.0000.5393, under Opinion 243/2014. Participants agreed to participate by signing the Informed Consent Form (ICF), ensuring their non-identification and confidentiality of responses.

### **Process of Transcultural Adaptation**

The first stage of this study began with the adaptation process of the CEQ together with the translation of the original instrument into English into the Portuguese language by two sworn bilingual translators resident in the city of Ribeirão Preto, SP, who worked independently and blindly, obtaining two versions in the Portuguese language.

In the second stage a meeting was held with a committee of seven specialists, two nursing teachers with experience in the method, three nurses from the hospital area and two linguists. The two Portuguese versions together with the original English version were evaluated with the purpose of comparing them and listing the items that maintained the semantic equivalence with the original instrument items. This stage resulted in the Portuguese consensual version 1. The third stage constituted the retro-translation of the Portuguese consensual version 1 for the original language of the instrument. This stage is performed by two other bilingual translators fluent in English, independently, blindly, to the original version

of the instrument. The purpose of these steps was to correct errors that compromised the meaning of the items and misinterpretations during the translation stage, ensuring that the translated version was accurate to the original version of the instrument.

The fourth stage consisted of the technical revisions of the instrument in a meeting with researchers and translators composed by the same committee of experts who had participated in the stage that resulted in the Portuguese consensual version 1. Thus, it was intended to compare this translated version to the retro-translations and the original one in English in order to reach a consensus on the terms equivalent to the original version. This stage resulted in the Portuguese consensual version 2, which was submitted to the evaluation of a committee of five judges.

The judges' committee consisted of nurses from general hospital admission units, who evaluated the degree of relevance and adequacy of the items of the instrument, considering clarity (textual expression of easy comprehension), pertinence (relevance of a suitable purpose), and appearance external configuration, aspect of items), assigning scores ranging from one to five for each item, the value being "one" the worst score and "five" the highest score.

In order to evaluate the agreement between the judges regarding the evaluation of the 27 items of competences of the CEQ regarding the criteria of Clarity, Appearance and Relevance and in a global way (without separating by the criteria) was used the statistic AC1<sup>(11)</sup>. In all analyzes the significance level of 5% ( $\alpha = 0.05$ ) was adopted. This step had the intention of adjusting the items of the instrument to the target population considering the semantic, idiomatic, experimental and conceptual equivalences<sup>(10)</sup>. Thus, approval of the changes only occurred when 80% of the members of the Committee agreed with the proposal, as already evidenced in another study<sup>(12)</sup>. At the end, the consensus version in Portuguese 3 was obtained.

Added adjustments suggested in the instrument went to the pilot stage with the intention of evaluating the comprehension of the items and the filling time, besides ensuring equivalence of the translated version of the CEQ with the original version. At this stage, 30 nurses from the medical clinic of a public teaching hospital were randomly selected. One instrument was partially filled and discarded. Thus, 29 nurses, who were asked to fill out and comment on version 3 of the instrument, pointed out difficulties and suggestions that could make the text more intelligible. It is noteworthy to emphasize that, according to the literature in transcultural adaptation, the number of participants may vary; some researchers suggest

that for the pre-test to be used between 30-40 participants<sup>(12)</sup>, number that approaches the one used in this study. For this stage, the calculation of *Alpha by Cronbach* which is an index used to measure the internal consistency of items on a scale<sup>(12)</sup>.

It is noteworthy that this work originated from a thesis of free teaching presented at the University of São Paulo<sup>(13)</sup>.

## RESULTS

Considering the extensive literature review and discussions of professionals in the area of human resources in nursing, it was possible to evidence content validation and that the competencies related to the CEQ nurses were pertinent to the Brazilian cultural context. For its use, the transcultural adaptation was necessary<sup>(10)</sup>. In the evaluation of the judges for each item of the CEQ regarding the clarity, appearance and pertinence were found the values that are listed in Table 1.

**Table 1** - Distribution of concordance indexes among judges of the 27 items of the CEQ, related to the criteria of clarity, appearance and relevance, 2017

Criteria	AC1_Gwet	EP	p-value
Clarity	0.3781	0.0797	0.0001
Appearance	0.5489	0.0591	0.0000
Relevance	0.8838	0.0394	0.0000
All	0.5986	0.0424	0.0000

Source: Research data, 2017.

Observing the three criteria evaluated (clarity, pertinence and appearance), the results showed good agreement with the AC1\_Gwet index = 0.5986, but when we observed the criteria alone, the criterion “clarity” presented AC1\_Gwet of 0.3778, considered in the low literature agreement. From these results, this step was completed with the modification of 13 items in order to improve the “clarity” criterion. Thus, we present in Chart 1 the original CEQ, the Portuguese consensual version 1 and the modified version according to the evaluation of the Judges Committee.

Original instrument	Consensual version in Portuguese	Final version CEQ* after judges' evaluation
1. Personal appearance and appropriateness to profession (professionalism)	1. Personal appearance and suitability to the profession (professionalism)	1. Personal appearance and <b>professional</b> (professionalism)
2. Commitment to working hours (management)	2. Commitment to workload (management)	2. Commitment to workload (management)
3. Communication with patients and their family (nursing process)	3. Communication with patients and their families (nursing process)	3. Communication with patients and their families (nursing process)
4. Communication with physicians and health team members (nursing process)	4. Communication with physicians and members of the health team (nursing process)	4. Communication with doctors and other team members <b>interdisciplinary</b> (nursing process)
5. Communication with hospital administration staff (human resources and finance personnel, etc.) (management)	5. Communication with hospital administration staff (human resources and finance, etc.) (management)	5. Communication with hospital management staff (human resources and finance) (management)
6. Communication with nursing colleagues (nursing process)	6. Communication with nursing colleagues (nursing process)	6. Communication with nursing colleagues (nursing process)
7. Commitment to hospital rules and regulations (professionalism)	7. Commitment to hospital rules and regulations (professionalism)	7. <b>Fulfill and enforce</b> the norms and regulations of the hospital (professionalism)
8. Commitment to the profession's ethical guidelines (professionalism)	8. Commitment to the profession's ethical guidelines (professionalism)	8. Commitment to the profession's ethical guidelines (professionalism)
9. Conceptual knowledge of nursing (familiarity with the sciences and theoretical concepts of nursing) (nursing process)	9. Conceptual knowledge of nursing (familiarity with the sciences and theoretical concepts of nursing) (knowledge of basic principles)	9. Conceptual knowledge of nursing (familiarity with <b>basic sciences</b> and theoretical concepts of nursing) (knowledge of basic principles)
10. Implementing nursing skills safely (nursing process)	10. Implementation of nursing skills with safety (nursing process)	10. Safety in the implementation of nursing skills (nursing process)
11. Keeping up-to-date with the latest in the nursing profession (knowledge of	11. Update on the latest innovations in nursing (knowledge of basic principles)	11. Update <b>knowledge in</b> nursing (knowledge of basic principles)

<p>basic principles)</p> <p>12. Participation in scientific research and utilization of its results (professionalism)</p> <p>13. Knowledge of the nursing process steps (knowledge of basic principles)</p> <p>14. Ability to implement the nursing process steps (nursing process)</p> <p>15. Ability to evaluate patients' needs (physical, psychological, social and spiritual) (problem-solving)</p> <p>16. Ability to diagnose patients' nursing problems (problem-solving)</p> <p>17. Providing nursing care according to priorities (problem-solving)</p> <p>18. Implementing nursing responsibilities based on appropriate scientific justification (problem-solving)</p> <p>19. Managing critical nursing cases appropriately (problem-solving)</p> <p>20. Using time efficiently (management)</p> <p>21. Initiating new ideas related to the profession's development (knowledge of basic principles)</p> <p>22. Having administrative abilities and accountability (professionalism)</p> <p>23. Showing enthusiasm in carrying out nursing responsibilities</p>	<p>12. Participation in scientific research and application of results (professionalism)</p> <p>13. Knowledge of the steps of the nursing process (knowledge of basic principles)</p> <p>14. Ability to implement the steps of the nursing process (nursing process)</p> <p>15. Ability to assess the patient's needs (physical, psychological, social and spiritual) (problem solving)</p> <p>16. Ability to diagnose patient's nursing problems (problem solving)</p> <p>17. Promotion of care according to priorities (problem solving)</p> <p>18. Implementation of nursing responsibilities based on appropriate scientific rationale (problem solving)</p> <p>19. Appropriate handling of critical nursing cases (problem solving)</p> <p>20. Efficient use of time (management)</p> <p>21. Generation of new ideas related to the development of the profession (knowledge of basic principles)</p> <p>22. Administrative and accountability skills (professionalism)</p> <p>23. Enthusiasm in conducting nursing activities (professionalism)</p>	<p>12. Participation in scientific research <b>and/or</b> application of results (professionalism)</p> <p>13. Knowledge <b>of steps</b> of the nursing process (knowledge of basic principles)</p> <p>14. Ability to implement the steps of the nursing process (nursing process)</p> <p>15. Ability to assess the patient's needs (biological, psychological, social and spiritual) (problem solving)</p> <p>16. Ability to diagnose patient's nursing problems (problem solving)</p> <p>17. <b>Ability to establish priorities n patient care</b> (problem solving)</p> <p>18. Execution of nursing responsibilities based on appropriate scientific rationale (problem solving)</p> <p>19. Proper handling <b>of critical patients</b> (troubleshooting)</p> <p>20. Efficient use of time <b>at work</b> (management)</p> <p>21. Generation of <b>new knowledge related</b> to the development of the profession (knowledge of basic principles)</p> <p>22. Administrative and commitment (professionalism)</p> <p>23. Enthusiasm <b>and motivation</b> in conducting nursing activities</p>
--	---	---

(professionalism)		(professionalism)
24. Applying hospital policies and procedures appropriately (professionalism)	24. Appropriate application of hospital policies and procedures (professionalism)	24. Appropriate application of hospital <b>philosophy</b> and procedures (professionalism)
25. Maintaining patient safety (nursing process)	25. Maintenance of patient safety (nursing process)	25. Maintenance of patient safety (nursing process)
26. Documenting nursing activities (nursing process)	26. Documentation of nursing activities (nursing process)	26. Documentation of nursing activities (nursing process)
27. Communicating nursing activities orally (nursing process)	27. Verbal communication of nursing activities (nursing process)	27. Communication of activities <b>with the team</b> of nursing (nursing process)

**Chart 1** - Transcultural Adaptation - Competency Evaluation Questionnaire (CEQ), original English version, Portuguese consensual version and final version, 2017

Source: Authors.

\*Competency Evaluation Questionnaire

Thus, in the final version there was a need to adapt expressions in items 1, 7, 23 and 24 (professionalism domain); item 4 (nursing process domain); items 9, 11 and 21 (knowledge of basic principles); items 17 and 19 (problem solving domain); item 20 (management domain); and item 27 (nursing process). Thus, after translation and adaptation, the instrument maintained the same 27 items of the original format, having only punctual changes in written form.

In terms of the socio-demographic characteristics of the participants, 89% were female, ranging in age from 26 to 44 years, 45% with more than 10 years of professional experience and 48% between five and 10 years of work in the hospital. For the total score, the Alpha by Cronbach of the pilot was 0.932, approaching the original instrument (0.97). In analyzing the Alpha, if the item was excluded, this measure ranged from 0.928 to 0.934 among the items of the instrument, showing little variability in the participants' evaluation.

## DISCUSSION

The reasons that led the researchers to seek an instrument that could evaluate the performance of the nurses were the growing concern to guarantee the care provided in the hospital context, as well as the need for a professional staff with specific competencies. Thus, when using an instrument to measure a phenomenon from one culture to another, it is essential to evaluate the relevance of this object of measurement in the culture itself in which

it will be applied. Given this premise, emphasis is placed on cross-cultural adaptation to semantic equivalence rather than the literal translation of terms.

In this way, the stages of transcultural adaptation of the CEQ were satisfactorily concluded. Although in the translation, permission to add words in the original text, this was not proposed by the translators. In contrast, after the evaluation of the committee of judges who participated in the content validity of the Portuguese consensus version 3, some words and expressions have undergone changes in order to obtain a clear and accessible language.

For item 1, the judges suggested changing the phrase “professional suitability” to “professional stance”, as they considered that the term “adequacy” could have different understandings in the Portuguese language. This item belongs to the domain “professionalism” which involves aspects of the profession such as professional posture and behavior in the work environment. In this way, the judges' committee judged that the word “posture” would bring greater clarity to the item.

In item 7, the term “commitment” was replaced by “complying with and enforcing”, which represents for the participants that not only commitment is a competence of the nurses, but also stimulate compliance, in this case, hospital standards ; in item 23 the word “motivation” was added, which is considered a complement to this item because, in addition to internal enthusiasm, an external motive should help the individual to act competently; and in item 24, the term “politics” has been replaced by “philosophy,” a term that best represents the competence to know and apply the doctrine and thoughts of the organization.

Appropriate application of hospital philosophy and procedures is done in the sense that philosophy means seeking to understand reality, and in an organization, philosophy “means the set of beliefs and values that guide institutional actions,” which are related to reality<sup>(14-15)</sup>.

In item 20, of the “management” domain, the term “work” was added, directing the focus of the statement that refers to the performance in the work. Items 9, 11, 13, 21 belong to the domain “knowledge of the basic principles”, that is, nurses qualified in thinking-knowledge skills in disease prevention, recovery of health and maintenance of life, and academic competencies of integrated in research and scientific production<sup>(16)</sup>. In item 9, the term “sciences” was replaced by “basic science”; in item 11, the phrase “update in relation to the latest nursing news” was changed by “updating knowledge in the nursing area; in item 13, the word “steps” was replaced by “steps”; and in item 21, the phrase “new ideas” by “foreground”.

Items 17 and 19 also changed. In item 17, the expression “Promotion of care according to priorities” was changed to “Ability to establish priorities in patient care” and item 19 “Appropriate management of critical cases of nursing” was modified by “Appropriate management of patients critical, “changes that made the items clearer, broadening the understanding of the nurses. Items 17 and 19 are related to the “problem solving” domain, which is a competence for the nurse who works in the hospital. In this sense, the professional can identify the problem in all its multifactes, and uses the knowledge it possesses, to employ a certain degree of precision in decision making, thus performing less tendentious and ineffective actions, while at the same time more resolute and definitive<sup>(17)</sup>.

Items 4 and 27 are related to the “nursing process” domain. In item 4, the expression “Communication with doctors and health team members” was suggested to replace the term “health” with “interdisciplinary”. In this sense, communicating with the interdisciplinary team means interacting with various professional categories in a process of working together and integrated. In item 27, also related to communication competence, the expression “Verbal communication of nursing activities” changed to “communication of activities with the nursing team”, demonstrating the concern to keep all nursing staff aware of the activities performed, contributing to the interaction between nurses and their staff.

In this perspective, the application of the pilot was essential for the proof that the final version was understandable for the professionals, since there were no suggestions from the participants in this step resulting in the final version. Despite the limited number of participants ( $n = 29$ ), the group was heterogeneous with respect to age and length of professional experience. In order to analyze the internal consistency of the items of the adapted version, total and respective domains, the coefficients of Alpha by Cronbach, reaching values considered adequate, being Alpha by Cronbach total of 0.932 and variation between 0.58 and 0.896 for the domains, corroborating with a recent study that, when validating an instrument denominated Nurses Core Competence in Palliative Care, obtained a Alpha by Cronbach in the domains of the instrument ranging from 0.51 to 0.97<sup>(18)</sup>. Other researchers have demonstrated in instrument validation study Alpha by Cronbach acceptable in the pilot test<sup>(12,19)</sup>. In this sense, the value of Alpha by Cronbach in this study was satisfactory with little variation between the items of competences, demonstrating coherence and agreement among the participants. In addition, it is known that the lower the variance of the items of the instrument, the greater the consistency and, consequently, the more reliable the instrument.

## CONCLUSIONS

Evaluation processes require adequate tools based on professional experience. Therefore, instruments for the evaluation of the competences of hospital nurses should help future professionals, managers and researchers to carry out diagnostic processes of their employees' competency framework for a given function, that is, to evaluate the contribution of each professional, as well as to favor the elaboration of training and development plans.

In this sense, the process of transcultural adaptation of the CEQ to the Portuguese language of Brazil was finalized after following the steps recommended in the literature. The title adopted for the adapted version was the Competency Evaluation Questionnaire (CEQ). During the adaptation of the instrument there was a change in some terms of the items in relation to the original version, aiming for greater clarity in the identification of competences for future application in Brazil. The pilot accomplishment completes the translation and adaptation process by selecting a sample of hospital nurses to test the applicability of the instrument. As a limitation of this study we have that, the statistical analysis performed does not exclude the need to perform other future tests to confirm the reliability and validity of the instrument with a larger number of participants.

## REFERENCES

1. Oliveira DA, Gonçalves RS, Barbosa ACQ. Human resources managers' perception towards skills management. *Rev FSA*. 2014 [cited 2018 Mar 10];11(2):1-26. Available from: <http://www4.fsanet.com.br/revista/index.php/fsa/article/viewFile/363/316>.
2. Camelo SHH. Professional competences of nurse to work in intensive care units: an integrative review. *Rev Latino-Am Enfermagem*. 2012;20(1):192-200. doi: <https://doi.org/10.1590/S0104-11692012000100025>.
3. Correa GC. Definição e desenvolvimento de competências: um paradigma no processo estratégico. *Rev CEPE*. 2015;39(67):103-16. doi: <https://doi.org/10.17058/cepe.v0i41.6294>.
4. Kaiser KL, Rudolph EJ. Achieving clarity in evaluation of community/public health nurse generalist competencies through development of a clinical performance evaluation tool. *Public Health Nurs*. 2003;20(3):216-27. doi: <https://doi.org/10.1046/j.0737-1209.20309.x>.
5. Kalb KB, Cherry NM, Kauzloric J, Brender A, Green K, Miyagawa L, et al. A competency-based approach to public health nursing performance appraisal. *Public Health Nurs*. 2006;23(2):115-38. doi: <https://doi.org/10.1111/j.1525-1446.2006.230204.x>.

6. Safadi R, Jaradeh M, Bandak A, Froelicher E. Competence assessment of nursing graduates of Jordanian universities. *Nurs Health Sci.* 2010;12(2):147-54. doi: <https://doi.org/10.1111/j.1442-2018.2009.00507.x>.
7. Nilsson J, Johansson E, Egmar AC, Florin J, Leksell J, Lepp M, et al. Development and validation of a new tool measuring nurses self-reported professional competence: the nurse professional competence (NPC) scale. *Nurse Educ Today.* 2014;34(4):574-80. doi: <https://doi.org/10.1016/j.nedt.2013.07.016>.
8. Giusti E, Befi-Lopes DM. Tradução e adaptação transcultural de instrumentos estrangeiros para o Português Brasileiro (PB). *Pró-Fono R Atual Cient.* 2008;20(3):207-10. doi: <https://doi.org/10.1590/S0104-56872008000300012>.
9. Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine.* 2000 [cited 2018 Apr 10];25(24):3186-91. Available from: <https://insights.ovid.com/pubmed?pmid=11124735>.
10. Guillemin F, Bombardier C, Beaton DE. Cross-cultural adaptation of health related quality of life measures: literature review and proposed guidelines. *J Clin Epidemiol.* 1993;46(12):1417-32. doi: [https://doi.org/10.1016/0895-4356\(93\)90142-N](https://doi.org/10.1016/0895-4356(93)90142-N).
11. Gwet L. Computing inter-rater reliability and its variance in the presence of high agreement. *Br J Math Stat Psychol.* 2008;61(Pt1):29-48. doi: <https://doi.org/10.1348/000711006X126600>.
12. Freitas NO, Caltran MP, Dantas RAS, Rossi LA. Translation and cultural adaptation of the Perceived Stigmatization Questionnaire for burn victims in Brazil. *Rev Esc Enferm USP.* 2014;48(1):25-33. doi: <https://doi.org/10.1590/S0080-623420140000100003>.
13. Camelo SHH. Adaptação transcultural e validação do Competency Evaluation Questionnaire-CEQ para enfermeiros hospitalares brasileiros [tese]. Ribeirão Preto (SP): Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo; 2017.
14. Cunha ICKO. Filosofia e política institucional e promoção da gestão do cuidado. In: Harada, MJCS, organizadora. *Gestão em enfermagem: ferramenta para prática segura.* São Caetano do Sul: Yedis Editora; 2011. p. 3-9.
15. Schmitz EL, Gelbcke FL, Bruggmann MS, Luz SCL. Philosophy and conceptual framework: collectively structuring nursing care systematization. *Rev Gaúcha Enferm.* 2016;37(esp):e68835. doi: <https://doi.org/10.1590/1983-1447.2016.esp.68435>.
16. Carvalho V. For an epistemology of nursing care and the educational development of the subjects of knowledge in nursing area - a philosophical point of view. *Esc Anna Nery.* 2009;13(2):406-14. doi: <https://doi.org/10.1590/S1414-81452009000200024>.
17. Eduardo EA, Peres AM, Almeida ML, Roglio KD, Bernardino E. Analysis of the decision-making process of nurse managers: a collective reflection. *Rev Bras Enferm.* 2015;68(4):668-75. doi: <https://doi.org/10.1590/0034-7167.2015680414j>.

18. Slåtten K, Hatlevik O, Fagerström L. Validation of a new instrument for self-assessment of nurses core competencies in palliative care. *Nurs Res Pract.* 2014;2014:ID 615498. doi: <https://doi.org/10.1155/2014/615498>.
19. Almeida CMT, Souza GC, Silva ERR. Transcultural adaptation into Brazilian portuguese of the Dietary Sodium Restriction Questionnaire (DSRQ). *Arq Bras Cardiol.* 2012;98(1):70-5. doi: <https://doi.org/10.1590/S0066-782X2011005000122>.

**Corresponding author:**

Laura Andrian Leal

E-mail: [laura.andrian.leal@usp.br](mailto:laura.andrian.leal@usp.br)

Received: 06.22.2018

Approved: 12.17.2018

Ahead of print