



TRANSLATION AND CROSS-CULTURAL ADAPTATION OF JEFFERSON SCALE OF PATIENT PERCEPTIONS OF PHYSICIAN EMPATHY (JSPPPE) FOR USE IN THE TEACHER-STUDENT RELATIONSHIP IN BRAZIL

TRADUÇÃO E ADAPTAÇÃO TRANSCULTURAL DA JEFFERSON SCALE OF PATIENT PERCEPTIONS OF PHYSICIAN EMPATHY (JSPPPE) PARA USO NA RELAÇÃO DOCENTE-DISCENTE NO BRASIL

TRADUCCIÓN Y ADAPTACIÓN TRANSCULTURAL DE LA ESCALA DE JEFFERSON DE PERCEPCIONES DE LOS PACIENTES SOBRE LA EMPATÍA DEL MÉDICO (JSPPPE) PARA SU USO EN LA RELACIÓN PROFESOR-ALUMNO EN BRASIL



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ABSTRACT: The present study aimed to translate and carry out a cross-cultural adaptation of the Jefferson Scale of Patient Perceptions of Physician Empathy instrument into Brazilian Portuguese and for use in the professor-student academic relationship. Six stages were used for the development of cultural adaptation: Initial Translation; Synthesis of Translations; Back translation; Expert Committee; Pretest; Submission of documentation to Developers. The pre-test involved 40 participants, undergraduate students, who evaluated the pre-final instrument in terms of clarity and adequacy. The results showed that the participants considered all items clear and adequate. The developer approved the final version. It was concluded that the translation and cross-cultural adaptation of the Jefferson Scale of Patient Perceptions of Physician Empathy for use in the teacher-student relationship showed adequate equivalences, resulting in the structuring of the instrument "Jefferson Scale of Student Perceptions on Teacher Empathy".

KEYWORDS: Empathy. Translation. Perception. JSPPPE.

RESUMO: O presente estudo objetivou traduzir e adaptar transculturalmente o instrumento Jefferson Scale of Patient Perceptions of Physician Empathy para a língua portuguesa do Brasil e para o uso na relação docente-discente. Foram utilizadas seis etapas para o desenvolvimento da adaptação cultural: Tradução Inicial; Síntese das Traduções; Retrotradução; Comitê de Especialistas; Pré-teste; Envio da Documentação aos Desenvolvedores. O pré-teste envolveu 40 participantes, estudantes dos cursos de graduação, que avaliaram o instrumento pré-final com relação a clareza e adequação. Os resultados mostraram que os participantes consideraram todos os itens claros e adequados. O desenvolvedor aprovou a versão final. Concluiu-se que a tradução e adaptação transcultural do Jefferson Scale of Patient Perceptions of Physician Empathy para o uso na relação docente-discente apresentou adequadas equivalências, resultando na estruturação do instrumento "Escala Jefferson das Percepções do Estudante sobre a Empatia do Professor".

PALAVRAS-CHAVE: Empatia. Tradução. Percepção. JSPPPE.

RESUMEN: El presente estudio tuvo como objetivo traducir y adaptar transculturalmente el instrumento Escala de Jefferson de Percepciones del Paciente sobre la Empatía del Médico al portugués brasileño y para su uso en la relación profesor-alumno. Se utilizaron seis etapas para el desarrollo de la adaptación cultural: Traducción Inicial; Síntesis de Traducciones; Traducción inversa; Comité de Expertos; prueba previa; Envío de documentación a Desarrolladores. El pretest involucró a 40 participantes, estudiantes de pregrado, quienes evaluaron el instrumento prefinal en términos de claridad y adecuación. Los resultados mostraron que los participantes consideraron todos los ítems claros y adecuados. El desarrollador aprobó la versión final. Se concluyó que la traducción y adaptación transcultural de la Escala de Jefferson de Percepciones de los Pacientes sobre la Empatía del Médico para su uso en la relación docente-alumno mostró equivalencias adecuadas, resultando en la estructuración del instrumento "Escala de Jefferson de Percepciones de los Estudiantes sobre la Empatía de los Docentes".

PALABRAS CLAVE: Empatía. Traducción. Percepción. JSPPPE.

Introduction

Interaction and communication between teachers and students represent challenges for improving the teaching-learning process and thus guide the construction of knowledge, which needs to be free from obstacles, especially so that there is fluidity in the process. For Troncon (2014), the quality of the educational process is high when factors such as affective elements are respected. For this reason, such elements must be part of the educational environment.

The teacher-student relationship in higher education directly impacts the learning that is built on a daily basis and with several implications, such as the evaluation process, the quality of management, the curricular structure and the interpersonal relationship. The feeling of trust must replace the hierarchical, authoritarian relationship, and must permeate the relationship, being fundamental for the student to be able to assimilate the content (OLIVEIRA; GIUSTINA, 2018).

One of the important concepts in the quality of relationships concerns the social skills that can be developed by individuals. According to Mandelli and Tonetto (2019, p. 9), "social skills constitute a set of interpersonal skills that are learned by the individual in social contexts and that help them respond in a socially competent way to the situations they face on a daily basis". Among social skills, empathy stands out, which, in the teacher-student relationship, according to Prette and Prette (2008, p. 526, our translation), is demonstrated in the educational context through the "verbal or non-verbal behavior of the educator that demonstrates understanding/acceptance of the situation and the emotional conditions of the student".

Empathy is a phenomenon that goes beyond the psychological aspects of the human being and is related to several mechanisms of the central nervous system, especially neuronal activities (TASSINARI; DURANGE, 2014). The term empathy was widely used by Carl Rogers (1985, p. 262, our translation), theorist considered one of the precursors of the humanistic approach, who stated: "Capturing the client's private world as if it were one's own world, but without ever forgetting this character of 'as if' – that's empathy." He also states that empathic understanding is so effective that it is capable of causing important changes in the personality, it is configured as understanding with a person, not about a person.

For Cardoso-Júnior *et al.* (2020), students who feel motivated and confident will develop their activities better, have better learning and, as a result, a better quality of life. It is essential that teachers understand the teaching-learning process in such a way that they can understand how it is structured, how it originates, how it develops and in which theoretical foundation it is anchored (PERES *et al.*, 2014).

Rogers and Rosemberg (1977, p. 71, our translation) established a parallel between the therapist-client relationship and the teacher-student relationship, stating that "A high degree of empathy is perhaps the most relevant factor in a relationship, being, without a doubt, a of the most important factors in promoting change and learning".

The teacher-student relationship is not limited to contact in the classroom, it goes beyond the relationship between these two actors and also involves management decisions. Educational management takes shape in the teacher-student relationship, deeply interfering in the quality of the relationship. It is a complex relationship and directly interferes with the teaching-learning process, attributing the assimilation of content to the feeling of well-being produced by this relationship (OLIVEIRA; GIUSTINA, 2018).

To assess empathy, it is necessary to have a measurement instrument at hand. In this regard, Ruiz *et al.* (2014) infers that the adaptation of an already consolidated instrument is essential, especially in some aspects of human behavior, such as empathy, which is subjective. In Brazil, there is a scale, translated into Portuguese - CARE (*Consultation and Relational Empathy*), which addresses empathy for application in medical practice, consisting of ten items (SCARPELLINI *et al.*, 2014).

There are no known instruments in Brazil that measure teacher empathy in the student's perception, in the Portuguese language. Thus, the objective of the present study was to translate into Brazilian Portuguese and carry out the cross-cultural adaptation of a scale to assess the student's perception, for use in the teacher-student relationship. For this purpose, the *Jefferson Scale was chosen of Patient Perceptions of Physician Empathy* (JSPPPE), in English, internationally known and accepted, which aims to measure the doctor's empathy in the patient's perception (HOJAT; DESANTIS; GONNELLA, 2017). The authors defined empathy as a predominantly cognitive attribute, which involves understanding the patient's experiences, concerns and perspectives, combined with the ability to communicate this understanding. In this way, they proposed an instrument that assesses the professional's empathy from the perspective of the person under care or patient, a phenomenon corresponding to what occurs in the teacher-student relationship, in which the teacher is the professional and the student is the person being cared for, which in an empathetic relationship with your teacher can have marks that will impact you for life.

Methodology

This is methodological research into the translation and cross-cultural adaptation of the JSPPPE instrument.

The *Jefferson Scale of Patient Perceptions of Physician Empathy* (Figure 1), was developed in the United States of America, to assess the patient's perception of the doctor's empathy in the doctor-patient relationship and is composed of five items (HOJAT; DESANTIS; GONNELLA, 2017). Each item is evaluated using a 7-point *Likert scale*, ranging from completely disagree (1) to completely agree (7).

Figure 1 – Jefferson Scale of Patient Perceptions of Physician Empathy

	Jefferson Scale of Patient Perceptions of Physician Empathy
statem from 1	c tions: We would like to know the extent of your agreement or disagreement with <i>each</i> of the following ents <i>about your physician named below</i> . Please use the following 7-point scale and write your rating num to 7 on the <u>underlined</u> space before each statement (1 means that you Strongly Disagree, and 7 means you ly Agree with the statement, a higher number indicates more agreement).
De	12
Dr. (123457 Strongly Disagree Strongly Agree Name of the physician here)
1.	Name of the physician here)
1	Can view things from my perspective (see things as I see them).
1 2 3	Name of the physician here)

Source: Hojat, DeSantis and Gonnella (2017, p. 81)

An initial contact was made via email with the author of the instrument, who granted authorization for the translation and cross-cultural adaptation for teacher-student application in Brazil, in May 2019.

To carry out the study, the six stages recommended by Beaton were used *et al.* (2000), in their study entitled *Guidelines for the Process of Cross-Cultural Adaptation of Self-Report Measures*, for the development of cross-cultural adaptation:

5

Stage I: Initial Translation

The instrument in the original language was translated separately into Portuguese by two bilingual individuals whose native language was Portuguese, but who were fluent in the language of the original instrument (English). Translator 1 was an individual familiar with the topic and concepts assessed in the questionnaire and translator 2 had no prior knowledge or knowledge of the topic.

At this stage, the translators also adapted the instrument for application in the teacherstudent relationship, analyzing the content of the form text.

Upon completing the translations with the adaptations, the translators prepared a written report containing the justification for the choices, comments and observations, highlighting the difficulties that were encountered.

Stage II: Synthesis of Translations

The two translators met with an observer, aiming to synthesize the two translations called T1 and T2. After the meeting, a summary was prepared, which gave rise to a common translation (T12), producing a report on the synthesis process, containing all the issues that arose and how the resolutions were reached.

Stage III: Back-translation

The back-translation, which consists of the T12 translation into the source language, was carried out by two native translators in an English-speaking country and fluent in Portuguese, resulting in two back-translations – RT1 and RT2. The translators had no knowledge of the original version of the instrument, nor any training in the area of the concept explored.

At this stage, the objective was content consistency, as this method aimed to highlight only gross inconsistencies in the translation or conceptual errors. This procedure aims to guarantee the reliability of the content of the original version.

Stage IV: Expert Committee

This stage aims to develop a pre-final version of the questionnaire to be tested in the field. The Expert Committee was composed of two undergraduate professors, a translator who participated in translating the instrument into Brazilian Portuguese and one who participated in the back-translation, in addition to a professional trained in Literature (Portuguese/English) and a professional trained in Methodology.

In addition to the professionals mentioned above, in order to enrich and improve Stage IV, suggested by Beaton *et al.* (2000), the researchers added a professional reviewer, aiming to resolve any doubts the Committee had during the process.

The original questionnaire, the translations carried out (T1, T2, T12, RT1, RT2) and the reports prepared at each stage, which documented and detailed the reasoning and process of each decision, were made available to the Expert Committee, which analyzed and prepared a new report ensuring equivalences in the Semantic, Linguistic, Cultural and Conceptual areas. These areas are detailed below:

1) Semantic Equivalence: evaluates whether the meaning of words are the same, maintaining the original meaning.

2) Linguistic Equivalence: due to the difficulty of translating idiomatic expressions and colloquialisms, the Committee needs to think and find or formulate an equivalent expression with a similar meaning in the target version.

3) Cultural Equivalence: a cultural adaptation of related items is carried out.

4) Conceptual Equivalence: in different cultures, words sometimes differ conceptually. Therefore, it is necessary to identify whether this type of word is present in the original questionnaire and in the other translated questionnaires.

To facilitate the organization of the equivalence analysis, the main researcher of the study made an equivalence questionnaire available in the form of a table, to evaluate the synthesized instrument (T12) regarding the degree of agreement of the equivalences of each item of the instrument using a scale: "Agree", "Disagree", and "Justification", ensuring equivalences in each area.

The Committee of experts and the study researchers, together, developed the pre-final version of the instrument, which was used in the pre-test stage (Stage V).

Pre-final Version Testing

To test the pre-final version of the adapted instrument, a questionnaire was administered to 40 students who, according to Beaton *et al.* (2000), constitute the ideal number of participants for a cross-cultural adaptation, in order to evaluate the clarity, acceptability and understanding of all parts that make up the instrument.

Sample characteristics

The sample was for convenience, with students from undergraduate courses in Medicine, Nursing, Educational Therapy, Physiotherapy and Speech Therapy at the State University of Health Sciences of Alagoas (UNCISAL), recruited by invitation through a digital application, with a Google *Forms link*, asking them to participate in the survey. Those who accepted the invitation continued to use the *link* that allowed them access to a digital platform in which, first, they had to read the Free and Informed Consent Form (TCLE) and confirm electronically whether they agreed to participate. Only through this electronic confirmation could the participant proceed to the next stage. Students over 18 years of age, regularly enrolled in the aforementioned courses, were included. Students who were on medical leave during the study period were excluded.

Assessment instrument

The section of the questionnaire related to assessing the interviewees' understanding of the instrument was composed of seven items corresponding to title, guidelines and five questions, for which questions with double-choice answers (yes or no) were prepared. If the language was not clear or adequate, they were asked to justify and make suggestions for modifications in a clarification field available just below each item.

Data analysis

The data obtained from the *Google Forms platform* were converted into *Microsoft* [®] *Excel software spreadsheets* so that, subsequently, tabulations and graphs relevant to the results of the demographic data and qualitative variables (questions) submitted for evaluation by the interviewees could be carried out.

The data was analyzed with descriptive statistics and the suggestions or comments were analyzed.

Step VI: Sending Documentation to Developers

At this stage, the developer assesses compliance with the guidelines at all stages and issues a final opinion. All forms and reports were sent and submitted to the developer of the original instrument "JSPPPE", who, in turn, does not have the possibility of changing any part of the content of the material sent.

Ethical aspects

The research project was submitted to the UNCISAL Ethics Committee and data collection only began after approval via Plataforma Brasil, under the Certificate of Presentation for Ethical Appreciation (CAAE) No. 29571219.6.0000.5011 with Consubstantiated Approval Opinion No. 4,211.743, issued on August 13, 2020.

The study was conducted in accordance with Resolution No. 466/12 of 12/06/2012 (BRASIL, 2012), which deals with ethical precepts and the protection of research participants.

Results

The study included a sample of one developer, three researchers, two translators, two native Americans for feedback, a committee of experts and 40 students for the testing stage of the final version.

Stage I: Initial Translation

The T1 and T2 versions of the JSPPPE instrument into Brazilian Portuguese, as well as the suitability of the instrument for application in the teacher-student relationship, were prepared by two translators (Figures 2 and 3), accompanied by the respective reports.

9

Figure 2 – Translation 1 (T1) of the *Jefferson Scale of Patient Perceptions of Physician Empathy*, 2021

TRADUÇAO 1 (T1)

Escala Jefferson da Percepção de Alunos da Empatia de Professores

Instruções: Gostaríamos de saber o grau de concordância ou discordância com cada uma das seguintes afirmações sobre o seu professor nomeado abaixo. Por favor, use a seguinte escala de 1 a 7 e escreva a sua avaliação numérica de 1 a 7 nos espaços sublinhados antes de cada afirmação (1 significa que você Discorda Plenamente e 7 significa que você Concorda Plenamente com a afirmação, ou seja, os números maiores indicam uma maior concordância).

1-----7
Discordo Plenamente Concordo Plenamente

É um professor compreensivo.

 Prof. (Nome do professor aqui)

 1.
 _____Consegue ver as coisas desde a minha perspectiva (vê as coisas como eu as vejo).

 2.
 _____Pergunta sobre o que está acontecendo na minha vida cotidiana

 3.
 _____Parece estar preocupado comigo e com a minha família.

 4.
 _____Entende as minhas emoções, sentimentos e preocupações.

Source: Researcher's archive

5.

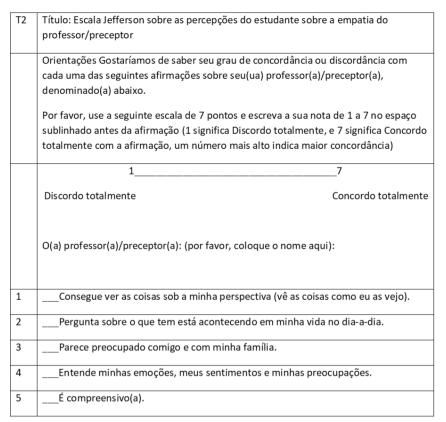
In the report regarding the T1 translation, the translator noted that, in general, there were no difficulties in adapting and/or translating. Below are some brief justifications for some choices:

1. the terms 'professor' and 'aluno' were chosen for the teacher-student relationship, as it is understood that they are more popular terms and easier to understand and distinguish;

2. the term *strongly*, which would literally translate as 'fortemente', was replaced by "plenamente", as used in similar research.

Apart from this, no other discrepancies were identified.

Figure 3 – Translation 2 (T2) from *Jefferson Scale of Patient Perceptions of Physician Empathy*, 2021



Source: Researcher's archive

In the report regarding the T2 translation, the translator reported that no difficulties or discrepancies were found in the process of translating and adapting the instrument.

Stage II: Synthesis of Translations

As a result of Stage II (Synthesis of translations), the two translators, with the main researcher as an observer, synthesized the translations giving rise to the T12 instrument (Figure 4), accompanied by their respective report.

Figure 4 – Synthesis of T1 and T2 (T12) translations of the Jefferson Scale of Patient Perceptions of Physician Empathy, 2021

Síntese das Traduções T1 e T2 (T12)				
(T12)				
Escala Jefferson Sobre as Percepções do Estudante Sobre a Empatia do Professor				
Orientações: Gostaríamos de saber seu grau de concordância ou discordância com				
cada uma das seguintes afirmações sobre seu(ua) professor(a), denominado(a) abaixo. Por				
favor, use a seguinte escala de 1 a 7 e escreva a sua avaliação numérica de 1 a 7 nos espaços				
sublinhados antes de cada afirmação (1 significa que você Discorda totalmente e 7 significa				
que você Concorda Totalmente com a afirmação, um número mais alto indica maior				
concordância).				
1				
Discordo totalmente Concordo totalmente				
O(a) professor(a): (por favor, coloque o nome aqui):				
1Consegue ver as coisas sob a minha perspectiva (vê as coisas como eu as vejo).				
2Pergunta sobre o que está acontecendo em minha vida no dia-a-dia.				
3Parece preocupado comigo e com a minha família.				
4Entende minhas em oções, meus sentimentos e minhas preocupações.				
5É compreensivo(a).				

Source: Researcher's archive

In the synthesis stage, after evaluating the T1 and T2 translations, the T12 translation was prepared, by mutual agreement, taking into account the following observations from the translators:

> "I don't agree with 'Discorda Plenamente', as fully is more relative to agreeing. Therefore, I recommend that you remain discordo totalmente ou concordo totalmente (Concordo could be plenamente, but this is a term that is much less used than totalmente)".

> "Prof.(a) (Nome do professor(a) aqui) – an article is missing here. In English they don't write the doctor, but in Portuguese we need to mention who

> " Entende as minhas emoções, sentimentos e preocupações". (See with your Portuguese teacher if everything can be classified as minhas, as the feelings appear)".

> " É um professor(a) compreensivo (a). (Ainda que seja fiel ao que está escrito na escala, ela repete a palavra médico ou professor e não seria necessário nem seria o ideal)".

> "After analyzing the common translation (T-12), sent as an attachment to your email below, I agree that it captured the best options of each translation version and, therefore, can be used as the final version".

Stage III: Back-translation

As a result of Stage III (Back-Translation), two North American natives, whose native language is English, with command of the Portuguese language, having no knowledge of the original version of the instrument and without any training in the object of study, produced two back-translations, translating the T12 instrument from Portuguese to English (Figures 5 and 6).

Figure 5 – Back-translation 1 (RT1) of the Jefferson Scale of Patient Perceptions of Physician Empathy, 2021

RETRO	OTRADUÇÃO 1 (RT1)
Jeffers	son Scale of Student Perception of Professors Empathy
statements reg Instruc statements bel Please use the statement, and	sh to know the degree to which you agree or disagree with each of the following arding your professor named below. tions: Please indicate the level of your disagreement/agreement with the low by writing a number, 1 to 7, in the space provided next to each statement. scale of 1 to 7 below, where 1 means you strongly (or fully) disagree with the d 7 means you strongly (or fully) agree with the statement. The higher the low you agree.
	17
Strongly (or f	ully) Disagree Strongly (or fully) Agree
The pro- 1. 2. 3. 4. 5.	ofessor: (please insert professor's name) Is able to view things from my perspective (views things the way I do). Asks me about what is occurring in my daily life. Seems to have concern for me and my family. Understands my emotions, my feelings and my concerns. Is understanding (or sympathetic).

Source: Researcher's archive

Figure 6 – Back-translation 2 (RT2) of the Jefferson Scale of Patient Perceptions of Physician Empathy, 2021

RETROTRADUÇÃO 2 (RT2)	
Jefferson Scale of Student Pere	ceptions of Professor Empathy.
with each of the following statements a the following scale from 1 to 7 and w underlined spaces before each statement	inderstand your level of agreement or disagreement about your professor, mentioned below. Please, use rite your numerical evaluation from 1 to 7 on the (1 indicates you disagree completely and 7 indicates ent, a higher number indicates a higher level of
13	
I Completely Disagree	I Completely Agree
 Asks about what is Seems to be worrie 	from my perspective. (Sees things as I seem them). happening in my day-to-day life. d about me and my family.
 Understands my em Is understanding. 	notions, my feelings and my concerns.

Source: Researcher's archive

Stage IV: Expert Committee

In this fourth stage, the Expert Committee, together with the researchers, in possession of the original questionnaire and all translations (T1, T2, T12, RT1, RT2) with respective reports, in addition to the support of a reviewer, evaluated the material using an equivalence questionnaire formatted in a table, made available by the main researcher, which allowed them to analyze each item of the synthesis instrument (T12) regarding the degree of semantic, linguistic, cultural and conceptual equivalence. From this, they developed, by consensus, the instrument in the pre-final version (Figure 7), that is, pre-test.

Figure 7 – Pre - Final Instrument - Jefferson Scale Pre Test of Patient Perceptions of Physician Empathy, 2021

PRE-FINAL INSTRUMENT - PRE-TEST			
Escala Jefferson Sobre as Percepções do Estudante Sobre a Empatia do Professor			
Orientações: Gostaríamos de saber seu grau de concordância ou discordância com cada uma das seguintes afirmações sobre seu(ua) professor(a), denominado(a) abaixo. Por favor, use a escala proposta e escreva a sua avaliação numérica de 1 a 7 nos espaços sublinhados antes de cada afirmação (1 significa que você Discorda totalmente e 7 significa que você Concorda Totalmente com a afirmação, um número mais alto indica maior concordância).			
12357 Discordo totalmente Concordo totalmente			
O(a) professor(a): (Por favor, coloque o nome aqui): 1Consegue ver as coisas sob a minha perspectiva (vê as coisas como eu as vejo). 2Pergunta o que está acontecendo no dia a dia de minha vida.			
 <u>Parece preocupado(a) comigo e com a minha família.</u> <u>Entende minhas emoções, meus sentimentos e minhas preocupações.</u> <u>É compreensivo(a).</u> 			
Source: Expert Committee			

Pre-Final Version Testing

40 studentes participated in the testing stage of the pre-final version, 5 (five) from Nursing, 7 (seven) from Physiotherapy, 15 (fifteen) from Speech Therapy, 10 (ten) from Medicine and 3 (three) from Occupational Therapy. The majority (70%) of participants were female, single students (90%) and a greater frequency of Speech Therapy and Medicine students, aged between 21 and 22 years, was observed.

Regarding the clarity and adequacy of all items in the form, everyone (100%) considered the clarity and adequacy to be adequate. One participant suggested changing the title of the instrument, proposing the use of a synonym for the word 'about', which appeared on two occasions, with the word 'about'. The suggestion was then forwarded to the Expert Committee. The Committee decided to replace one of the words "about" with "das" and the title of the pre-final instrument was adjusted to "Jefferson Scale of Student Perceptions of Teacher Empathy" (Figure 8).

Figure 8 – Pre-Final Instrument - Pre-Test of the "Jefferson Scale of Student Perceptions of Teacher Empathy"

PRE-FINAL INSTRUMENT - PRE-TEST

Escala Jefferson das Percepções do Estudante Sobre a Empatia do Professor

Orientações: Gostaríamos de saber seu grau de concordância ou discordância com cada uma das seguintes afirmações sobre seu(sua) professor(a), denominado(a) abaixo. Por favor, use a escala proposta e escreva a sua avaliação numérica de 1 a 7 nos espaços sublinhados antes de cada afirmação (1 significa que você Discorda totalmente e 7 significa que você Concorda Totalmente com a afirmação, um número mais alto indica maior concordância).

1-----7 Discordo totalmente Concordo totalmente

O(a) professor(a): (Por favor, coloque o nome aqui):

- 1. ___Consegue ver as coisas sob a minha perspectiva (vê as coisas como eu as vejo).
 - Pergunta o que está acontecendo no dia a dia de minha vida.

3. ____Parece preocupado(a) comigo e com a minha família.

4. ___Entende minhas emoções, meus sentimentos e minhas preocupações.

5. <u>É compreensivo(a)</u>.

2.

Source: Researcher's archive

Step VI: Sending Documentation to Developers

The pre-final instrument "Jefferson Scale of Student Perceptions of Teacher Empathy" was translated into the developer's language (English) and, together with the other forms resulting from all stages and reports, was sent by email to the developer of the instrument for evaluating compliance with all stages and issuing the final opinion. The developer, Prof. Dr. Mohammadreza Hojat, approved the material sent.

Discussion

The purpose of this study was to translate and adapt to the Brazilian Portuguese the *Jefferson Scale of Patient Perceptions of Physician Empathy* (JSPPPE) instrument for assessing empathy to be used in the teacher-student relationship, as well as to culturally adapt it for use in Brazil. The steps taken in this process followed the recommendations of Beaton *et al.* (2000) and were successfully completed.

The study demonstrated that the translation and the cultural adaptation process produced an instrument capable of evaluating teacher empathy in the teacher-student relationship.

The translation and cross-cultural adaptation of an instrument requires methodological rigor and goes beyond the act of literally translating a text. It is necessary to take into account an

entire transcultural context, involving the understanding and evaluation of the following aspects: a) Semantic: checking whether the items translated from the original language to the target language maintain the same meaning/meaning as the original version; b) Linguistic: refers to expressions that are difficult to translate, such as idiomatic expressions, colloquialisms or jargon; c) Cultural: assess whether the items suit the culture to which the instrument will be applied; and d) Conceptual: investigate whether there is a correlation between the content of the instrument and the experiences of the target population, without distortions with words that have different conceptual meanings (BEATON et al., 2000).

In order to meet these aspects, the participants in the translation process and the committee of experts were selected based on their technical capabilities, with a view to meeting the criteria recommended by Beaton et al. (2000). Still in accordance with the author, the number of participants in the pre-test stage was determined taking into account the established criteria.

The choice of this sequence and method with strict compliance with the steps, having taken into account the aspects highlighted by the translators, back-translators, committee of experts and students, with attention to the details and details of the suggestions listed, favored obtaining the Portuguese language of a precise, short (5 items), objective and easy-tounderstand instrument. The use of an instrument that assesses the student's perception of the teacher's empathy may favor an improvement in this relationship, consequently in learning.

The teacher-student relationship is of fundamental importance for effective learning, because this quality is what translates the level of this learning (ROGERS; ROSEMBERG, 1977; FREIRE, 1996). In this aspect, empathy is an essential element, as it is through an empathetic understanding on the part of the teacher with the student that they grow, learn and form themselves for life. This empathetic look is also a desire on the part of students (OLIVEIRA; GIUSTINA, 2018; LESSA, 2017). To this end, providing an instrument that can assess empathy in the teacher-student relationship is an essential condition for improving the teaching-learning process, as well as supporting researchers, managers and teachers towards a more humanized and healthier practice in this relationship.

It is pertinent that the learning of empathy is developed from as early as possible in life and especially improved and stimulated in academic life, in preparation for future application in professional practice. From this context, the importance of working with empathy emerges from the teacher-student relationship.

Rogers and Rosemberg (1977) established a parallel between the relationship between therapist-client and teacher-student and emphasized the relevance of empathy in learning. Likewise, Beck *et al.* (1982) saw empathy as a key element in patient adherence to treatment. In order for there to be a better result in the training and learning of students, it is important that they realize that there is an empathetic look and genuine interest on the part of teachers and that these professionals are attentive to their doubts and needs for guidance, based on the assumption that the student must feel welcomed, heard, qualified, understood and perceived as a person, so that they can be more likely to join and continue the course. It is essential that the teaching professional has a repertoire of well-developed social skills.

Final remarks

The present work successfully carried out the translation into Portuguese and crosscultural adaptation of the JSPPPE instrument for use in the teacher-student relationship in Brazil, presenting adequate semantic, linguistic, cultural, and conceptual equivalence for the Brazilian population, resulting in the structuring of the "Scale Jefferson of Student Perceptions of Teacher Empathy." Subsequently, validation should be carried out with a larger number of participants, aiming to analyze the psychometric properties and test its reproducibility.

This study is extremely pertinent in bringing an instrument translated and crossculturally adapted into Brazilian Portuguese on teacher-student empathy and opens up the possibility of promising studies on the subject. It will also allow HEIs to have the opportunity to identify aspects that can be improved in the teacher-student relationship, contributing to the training of professionals who, having been trained within the scope of an empathetic relationship, will also be able to translate this relationship into their daily practices.

Finally, it is worth highlighting that looking back at the teacher-student relationship in terms of empathy on the part of the teacher can improve the teaching-learning process, directly interfering in the quality of training of future professionals and, consequently, the quality of services.

REFERENCES

BEATON, D. *et al.* Guidelines for the process of cross-cultural adaptation of self-report measures. **Spine**, v. 25, n. 24, p. 3186-3191, 2000. Available at: https://journals.lww.com/spinejournal/citation/2000/12150/guidelines_for_the_process_of_cr oss_cultural.14.aspx. Access: 17 Dec. 2022.

BECK, A. T. et al. Terapia cognitiva da depressão. Rio de Janeiro: Zahar, 1982.

BRASIL. **Resolução n. 466, de 12 de dezembro de 2012**. Aprovar as seguintes diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Brasília, DF: Conselho Nacional de Saúde, 2012. Available at:

https://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf. Access: 10 Oct. 2022.

CARDOSO-JÚNIOR, A. *et al.* Tradução e adaptação transcultural do Instructional Materials Motivation Survey (IMMS) para o Português do Brasil. **Revista Brasileira de Educação Médica**, Brasília, v. 44, n. 4, p. 1-10, 2020. Available at:

https://www.scielo.br/j/rbem/a/QBdB3dNCypkzC5Mw4XtYx5x/?lang=pt. Access: 18 Mar. 2022.

FREIRE, P. **Pedagogia da autonomia**: Saberes necessários à prática educativa. São Paulo: Paz e Terra, 1996.

HOJAT, M.; DESANTIS, J.; GONNELLA, J. S. Patient perceptions of clinician's empathy: Measurements and psychometrics. **Journal of Patient Experience**, v. 4, n. 2, p. 78-83, 2017. Available at: https://journals.sagepub.com/doi/10.1177/2374373517699273. Access: 10 Dec. 2022.

LESSA, S. S. **Aprendizagem da empatia na relação médico-paciente**: estudo entre estudantes do internato de escolas médicas do Nordeste do Brasil. Orientador: Nildo Alves Batista. 2017. 128 f. Tese (Doutorado em Ciências) – Universidade Federal de São Paulo, São Paulo, SP, 2017.

MANDELLI, R. R.; TONETTO, L. Design para empatia: brinquedos e brincadeiras como oportunidade para promover o desenvolvimento emocional. **Pesquisas e Práticas Psicossociais**, São João del-Rei, v. 14, n. 1, p. 1-22, 2019. Available at: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-89082019000100005&lng=pt&nrm=iso&tlng=pt. Access: 25 Feb. 2022.

OLIVEIRA, W. A.; GIUSTINA, F. P. D. Gestão educacional: relação docente/discente no ensino superior. **Revista de Enfermagem da FACIPLAC**, Brasília, v. 1, n. 1, p. 1-3, 2018. Available at: https://ojs.uniceplac.edu.br/index.php/refaci/issue/view/70/102. Access: 16 Apr. 2022.

PERES, C. M. *et al.* Abordagens pedagógicas e sua relação com as teorias de aprendizagem. **Medicina (Ribeirão Preto)**, Ribeirão Preto, v. 47, n. 3, p. 249-255, 2014. Available at: https://www.revistas.usp.br/rmrp/article/view/86611. Access: 02 Mar. 2022.

PRETTE, Z. A. P.; PRETTE, A. Um sistema de categorias de habilidades sociais educativas. **Paidéia**, Ribeirão Preto, v. 18, n. 41, p. 517-530, 2008. Available at: https://www.revistas.usp.br/rmrp/article/view/86611. Access: 2 May 2022.

ROGERS, C. R. Tornar-se pessoa. São Paulo: Martins Fontes, 1985.

ROGERS, C. R.; ROSEMBERG, R. L. A pessoa como centro. São Paulo: EPU, 1977.

RUIZ, L. *et al.* **Producción de materiales de comunicación y educación popular**. Ciudad Autónoma de Buenos Aires: Departamento de Publicaciones de la Facultad de Derecho y Ciencias Sociales de la Universidad de Buenos Aires, 2014. *E-book*. Available at: http://www.sociales.uba.ar/wp-content/blogs.dir/219/files/2015/07/2-Prod-Materiales-B.pdf. Access: 22 Jun. 2021.

SCARPELLINI, G. R. *et al.* Escala CARE de empatia. **Medicina (Ribeirão Preto),** Ribeirão Preto, v. 47, n. 1, p. 51-8, 2014. Available at: https://www.revistas.usp.br/rmrp/article/view/80098. Access: 12 Oct. 2021.

TASSINARI, M. A.; DURANGE, W. T. Experiência empática: da neurociência à espiritualidade. **Revista da Abordagem Gestáltica**, Goiânia, v. 20, n. 1, p. 53-60, 2014. Available at: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-68672014000100007&lng=pt&nrm=iso. Access: 02 June 2021.

TRONCON, L. E. A. Ambiente educacional. **Medicina (Ribeirão Preto),** Ribeirão Preto, v. 47, n. 3, p. 264-271, 2014. Available at: https://www.revistas.usp.br/rmrp/article/view/86614. Access: 10 Nov. 2021.

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