# Use of cognitive interviews to produce the Brazilian versions of instruments for the assessment of Family-Centered Practice

Aplicação de entrevistas cognitivas para produção de versões brasileiras de instrumentos de avaliação da prática centrada na família

Daniela Virginia Vaz<sup>1</sup>, Dayana Karen Esteves da Silva<sup>2</sup>, Débora Silva Campos<sup>2</sup>, Ana Amélia Moraes Antunes<sup>3</sup>, Lívia de Castro Magalhães<sup>4</sup>, Sheyla Rossana Cavalcanti Furtado<sup>1</sup>

http://dx.doi.org/10.11606/issn.2238-6149.v29i1p41-49

Vaz DV, Silva DKE, Campos DS, Antunes AAM, Magalhães LC, Furtado SRC. Use of cognitive interviews to produce the Brazilian versions of instruments for the assessment of Family-Centered Practice. Rev Ter Ocup Univ São Paulo. 2018 Jan.-Apr.;29(1):41-9.

ABSTRACT: Family-Centered Practice (FCP), considered the *best practice* in childcare, is a set of attitudes and values for clinical practice that recognize the child's family as the center of care. MPOC-20 and MPOC-SP are questionnaires that evaluate the perception of caregivers and health professionals about FCP in a given service. This study describes part of the cross-cultural translation and adaptation process of the instruments into Brazilian Portuguese. The translation should guarantee a total understanding of the questions by the interviewees. To evaluate such understanding, we used the method of cognitive interviews. Problems of understanding were identified in both questionnaires and adjustments were made to remove them. The use of the cognitive interviews was essential for the translation and cultural adaptation of the questionnaires.

**KEYWORDS:** Cognitive interview; Family-Centered Practice; MPOC-20; MPOC-SP.

Vaz DV, Silva DKE, Campos DS, Antunes AAM, Magalhães LC, Furtado SRC. Aplicação de entrevistas cognitivas para produção de versões brasileiras de instrumentos de avaliação da prática centrada na família. Rev Ter Ocup Univ São Paulo. 2018 jan.-abr.;29(1):41-9.

RESUMO: A Prática Centrada na Família (PCF), considerada como *best practice* na assistência à criança, é um conjunto de atitudes e valores que reconhece a família como centro do cuidado. A MPOC-20 e MPOC-SP são questionários que avaliam a percepção dos cuidadores e dos profissionais de saúde, acerca da PCF. Este trabalho descreve o processo de tradução e adaptação transcultural dos instrumentos para o português brasileiro. A tradução deve garantir total compreensão das questões pelos entrevistados, assim, para avaliar essa compreensão utilizamos como ferramenta a entrevista cognitiva. Foram identificados problemas de compreensão em ambos os questionários, e foram feitos ajustes para solucioná-los. O uso da entrevista cognitiva foi fundamental para o processo de tradução e adaptação transcultural dos questionários.

**DESCRITORES:** Entrevista cognitiva; MPOC-20; MPOC-SP; Prática Centrada na Família.

This study is part of the monograph 'Cognitive Interview: adjustments of the Brazilian versions of the MPOC-20 and MPOC-SP', of the Undergraduate Program in Physical Therapy of the Universidade Federal de Minas Gerais.

<sup>1.</sup> Professors in the Department of Physical Therapy, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, BR. E-mail: danielavvaz@gmail.com; sheylaufmg@yahoo.com.br

<sup>2.</sup> Undergraduate student of Physical Therapy, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, BR. E-mail: dayana. kasilva@hotmail.com; deboracampos94@hotmail.com

<sup>3.</sup> Physical Therapist of the SARAH Network of Rehabilitation Hospitals and Graduate Student in Rehabilitation Sciences of the Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, BR. E-mail: antunesanaamelia@gmail.com

<sup>4.</sup> Professor in the Department of Occupational Therapy, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, BR. E-mail: liviacmag@gmail.com

Corresponding address: Daniela Virginia Vaz. Department of Physical Therapy, Universidade Federal de Minas Gerais. Avenida Antônio Carlos, 6627, Campus Pampulha. Belo Horizonte, MG, Brazil. Zip-code: 31270-901. E-mail: danielavvaz@gmail.com

#### INTRODUCTION

hysical Therapy and Occupational Therapy, as clinical professions, are constantly challenged to ensure quality service. Rehabilitation professionals, patients and families long for therapeutic results that meet the specific demands and needs of each party involved. Traditional models are based on a vertical assistance, in which the therapist is the authority who determines what should be done in therapy. However, currently, physical and occupational therapists have approached a more horizontal models based on the principles of Family-Centered Practice (PCF), in which the therapeutic decisions and responsibilities are shared with the families<sup>1</sup>.

The PCF is a set of attitudes and values that guide the care offered to children with disabilities, conceding that the family has unique experiences and privileged knowledge about the particular needs and skills of the child. Hence, this approach enhances the perspective of the family, which makes the decisions about care in partnership with service providers. The premise of PCF is sharing information in an individualized and flexible manner, emphasizing the importance of caring not only for the child with disabilities but for all family members, since the health and well-being of the family are reflected in the child's development<sup>2-6</sup>.

Professionals who follow such philosophy seek to educate families on the importance of their active participation in treatment, because the gains provided by the therapy are substantially higher when the objective is focused on the needs identified by the family<sup>6</sup>. The PCF has the advantages of promoting parental satisfaction, reducing stress, motivating, and generating greater adherence to therapy programs<sup>6</sup>. Autonomy and the exercise of choice are the basis of PCF. Such principles contribute to increase the effectiveness of rehabilitation, in addition to highlighting the fundamental rights of those who receive health care<sup>7</sup>, an essential factor in any therapeutic practice.

The assessment of a service regarding the degree of centrality in the family allows recognizing which improvements are needed<sup>8</sup>. In this evaluation, the systematized tools are more reliable than the informal assessments. Currently, there are already measures, such as the Measure of Process of Care (MPOC), which can be used to evaluate the services in a systematic way.

The MPOC consists of standardized questionnaires, originally developed in Canada to measure the implementation of PCF in services for children with chronic developmental problems<sup>8</sup>.

Among the MPOC versions, the MPOC-56, MPOC-20, and MPOC-SP (Service Providers) are highlighted. MPOC-56 is a questionnaire on the parents' perceptions about the quality of service provision to the child<sup>9,10</sup>; the short version of this instrument is the MPOC-20. The MPOC-SP, in turn, is for the professionals involved in the care of patients to express their perception about the service<sup>8</sup>. These three instruments consist of standardized questionnaires that can be self-applied. MPOC-56 shows high internal consistency (Cronbach's alpha between 0.81 and 0.96), test-retest reliability (ICC between 0.78 and 0.88), and construct validity8. The MPOC-20 version also presents good validity and internal consistency (Cronbach's alpha between 0.83 and 0.90)11. The MPOC-SP has satisfactory psychometric properties, with good internal consistency (Cronbach's alpha between 0.76 and 0.88) and test-retest reliability (ICC between 0.79 and 0.99)12. These questionnaires allow to calculate scores that reflect the degree to which a given service is focused on the child and the family.

It is important to assess how much each service adopts the PCF principles, to improve the rehabilitation process. The perceptions of parents and professionals about specific areas of care that require improvements are essential for the clinical practice to be in fact focused on the family. Thus, the use standardized scales as the MPOC could contribute to improve physical and occupational therapy services in Brazil. It is therefore important to translate and adapt these scales for the reality of the country.

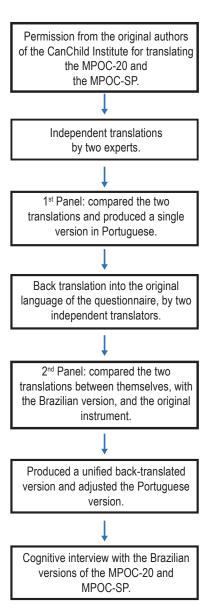
To produce Brazilian versions of the scales, strict procedures of cross-cultural translation are required, which are used internationally. These procedures include translation, back-translation, and contextual adjustments of the questionnaires (originally written in English) to create versions in Brazilian Portuguese<sup>12</sup>. Since the MPOC was created in the format of self-applied questionnaires, one must also analyze whether the respondents understand the statements and response options, as well as the contents and purpose<sup>13</sup>. "Cognitive interviews" are recommended to verify the understanding of each item of the questionnaire by the target population. These interviews are a method to

investigate whether the statements and response options of a questionnaires are interpreted as expected<sup>14</sup>, which allows to determine if there is need for adjustments in the translated version, to adapt it to the cultural context of the country for which the translation is made.

In this study, the understanding of the Brazilian translation of the MPOC-20 and MPOC-SP by parents/ caregivers and professionals involved in children's rehabilitations was investigated. To do so, the cognitive interview was used. Results of this analysis will enable the adjustments of the Brazilian version of two MPOC questionnaires, so we can count on valid and reliable instruments to evaluate the quality of care in clinical practice and research in child rehabilitation in Brazil.

#### METHODOLOGICAL PROCEDURES

This study used the preliminary translations of the MPOC-20 and MPOC-SP. The first step of the production process of these versions involved the obtainment of permission from the original authors, the CanChild foundation, to translate the instruments. Then, in accordance with the recommend procedures for the cross-cultural translation of questionnaires<sup>13</sup>, two experts (a college professor and a physical therapists) have made independent translations. A panel of "experts" was then formed, which consisted of three college professors, two physical therapists, and two undergraduate students of Physical Therapy. The panel compared the two translations to identify differences and disagreements and then produce a single version, which was submitted to the reverse translation into the original language of the questionnaire. As well as the translation, the back-translation was performed by two independent translators, an American and a British. A second panel, composed of a physical therapist and two college professors, compared the translations between themselves, with the Brazilian version, and with the original questionnaires in English. From this, a unified back-translated version was produced and final adjustments were made on the Brazilian translations of MPOC-20 and MPOC-SP. After the CanChild evaluated and approved the unified backtranslation and the final version in Portuguese, it was verified, through a cognitive interview, whether the translated questionnaires were well understood by Brazilian parents/caregivers and professionals. Figure 1 summarizes the steps in the process.



**Figure 1** – Diagram of the stages of production of the Brazilian versions of the MPOC-20 and MPOC-SP

## **Participants**

The study consisted of a convenience sample with nine parents/caregivers and nine professionals recruited in the rehabilitation service of the Bias Fortes Outpatient Clinic of the Clinic Hospital of the Universidade Federal de Minas Gerais (UFMG). For the MPOC-20, parents/caregivers of children with chronic development problems were interviewed

and, for MPOC-SP, interviews were conducted with professionals involved in children's rehabilitation. All participants signed an Informed Consent Form specific for each version applied.

The minimum prediction of recruitment was of nine participants to evaluate each questionnaire. Sample size was defined based on studies that indicate that two or three interviews in three rounds are enough to reveal the most critical problems of the questionnaire<sup>13</sup>. For the cognitive interview of the MPOC-20 version, parents/caregivers of children in monitoring for a year or more on the service were included; those who did not attend more than 50% of the consultations offered were excluded. For the MPOC-SP, professionals who acted directly on children's rehabilitation over the last year were included, being excluded those who played this role for less than 60 days in the last year.

#### **Procedures**

Cognitive interviews can be carried out through two processes: 1) *thinking out loud* and 2) *follow-up poll*<sup>14</sup>. The first consists in encouraging the participants to verbalize their thoughts to answer the questionnaire statements. The second involved direct and explicit questions made by the interviewer. These procedures can be used together since they fit naturally and provide important information about the understanding of the interviewee about the questionnaire items<sup>14</sup>.

Both types of cognitive interview were performed from July to August 2017 and were recorded by a mobile device. During the cognitive interview, items regarded as difficult or misinterpreted by the interviewees were marked by the interviewers. The items selected for adjustments were those in which two or more caregivers (for MPOC-20) and at least one professional (for MPOC-SP) had difficulty understanding. When the interviewee requested examples, repetition of the statement and/or response options, the interviewers considered that there was difficulty in understanding.

For the Brazilian preliminary version of the MPOC-20 and MPOC-SP, the cognitive interviews were planned and performed in three steps: initially, three different participants of each group were interviewed and, based on the data of the interviews of each group, the necessary adjustments were made in specific items to correct the problems that have emerged. These adjustments were made by a physical therapist and two undergraduate students of Physical Therapy.

We adapted the wording of questions whose answers indicated understanding difficulty. After these corrections, we started the second round of interviews, in which the same process was conducted. There was also a third round of interviews, applying the questionnaires with adaptations from the previous rounds. After the third round, it was clear that no further adjustments were required.

Interviews were initiated with the method of thinking out loud; participants received standard instructions: "Please, tell me what you though to answer this question" and "think about your answer out loud". In this procedure, the researcher did not influence the participant's responses.

Then, the researchers scanned the responses to encourage interviewers to express themselves more clearly and completely. To do so, hey asked if the participants could tell, with their own words, the subject of a given question or how they understood each question. Researchers compared the meaning given by the respondents to the statements of the questions with the meaning expected in the original English version. The surveys allowed identifying statements whose translation led to difficulties of understanding

## **Data Analysis**

After each round of interviews, a panel of experts (comprising two undergraduate students in Physical Therapy and a physiotherapist technically responsible for a rehabilitation service) analyzed the voice files to identify the reasons mentioned by the interviewees for difficulties in understanding. Based on this analysis, the panel adjusted the Portuguese version of MPOC, aiming at eliminating the interpretation difficulties in the next round of interviews.

## **RESULTS**

Three rounds of cognitive interviews were conducted for each questionnaire. Each round involved three interviewees, totaling nine caregivers for MPOC-20 and nine professionals for MPOC-SP, i.e. 18 participants. In the cognitive interviews with MPOC-20, most participants were mothers, in addition to a father and a grandmother, who were also part of the study. The mean age of the participants was 35.7 years. As for educational level, five caregivers had completed High School,

one had some High School, and three declared to have some Elementary or Middle School education. The time that the children received care ranged from 16 months to 7 years. As for the MPOC-SP, of the nine professionals interviewed, eight were female and one were male the mean age was 32.6 years. In addition, two had Graduation, and the time working with children's care ranged from 14 months to 22 years.

For the MPOC-20, whereas there were ten requests for example, eight requests to repeat the statement and two to repeat response options, eight

questions were adjusted. The main difficulty presented by the interviewees was understanding terms such as "competent", "long period of time", "time of talk", "same direction", "from person to person" and "format". Other two difficulties were: the lack of understanding that there were two questions on the same item (item 4) and the misunderstanding of an example (item 11) Based on these difficulties, the writing of the questions was adjusted to make them more accurate and understandable. All the adjustments and problems identified are described in Table 1.

Table 1 – Summary of cognitive interviews conducted with parents/caregivers about the understanding of the MPOC-20 items

Question	Round 1	Round 2	Round 3	Detail of the problem found	Final writing of the question
1 helped you feel competent as mother or father?		RS EX		Difficulty in understanding "competent," even with the use of synonyms.	helped you feel competent as mother or father (for example, did they praise you or gave incentives during treatments)?
4let you choose when to receive information and the type of information you wanted?	RS EX RR	RS EX		Difficulty in understanding that there were two questions on the same item. Disregard of the term "when" and answer based solely on "type."	let you choose the moment to receive information and the type of information you wanted (for example, could you ask questions at the time you wanted)?
6ensured that at least one professional of the team worked with you and your family for a long period of time?	RS EX	RS EX		Difficulty in quantifying the "long period of time," in addition to not understanding the purpose of the question.	ensured that at least one professional of the team worked with you and your family throughout this years (for example, do you have a person of reference within the team)?
9gave you enough time to talk, so you do not feel rushed?	EX			Difficulty in understanding when would the "talk time" be.	gave you enough time to talk, so you do not feel rushed (for example, could you ask questions with calm during the treatment)?
10planned together so that everybody was working in the same direction?			RS EX	Difficulty with the term "same direction."	planned together so that everybody was working for the same goal?
11treated you as an equal, rather than just as father or mother of a patient (for example, did not just called you "dad" or "mom")?	RS EX			Difficulty with the example of the question and lack of understanding of what would be being called just dad or mom.	treated you as an equal, rather than just as father or mother of a patient (for example, did they call you by your name and knew your child's name)?

Continues...

Table 1 – Summary of cognitive interviews conducted with parents/caregivers about the understanding of the MPOC-20 items

Question	Round 1	Round 2	Round 3	Detail of the problem found	Final writing of the question
12gave you information that did not vary from person to person?	EX	RR		Difficulty in understanding "from person to person," in addition to not understanding the purpose of the question.	gave you information that has not changed from one professional to another (for example, did all the professionals treating you child give you the same information)?
19had information available to you in several formats, such as primer, kit, brochure, video, etc.?	RS EX			Difficulty in understanding the term "format."	had information available to you in the form of primer, kit, brochure, video, etc.?

Caption: RR: Requested repetition of response options; RS: Requested repetition of the statement; EX: Example requested.

For the MPOC-SP, eight requests for example, five requests to repeat the statement and two to repeat response options, indicating that eight questions needed adjustments. The most common difficulties were related to the scope of terms, namely, the professionals did not fully understand

the scope of terms such as "home program", "service providers", "whole family", and "general". Other problems were associated with the understanding of examples, words, and objectives of the question. The difficulties found, as well as the respective adjustments, can be found in Table 2.

Table 2 – Summary of cognitive interviews conducted with professionals about the quality of the MPOC-SP items

Question	Round 1	Round 2	Round 3	Detail of the problem found	Final writing of the question
2offered to parents and children a positive return or encouragement (e.g. in conducting a domiciliary program)?	RR RS EX			Difficulty in understanding the scope of "domiciliary program."	offered to parents and children a positive return or encouragement (e.g. in conducting a home orientation)?
4discussed expectations for each child with other service providers, to ensure the consistency of thoughts and actions?			EX	Difficulty in understanding the scope of "service providers."	discussed expectations for each child with other service providers (whether from you professional category or not), to ensure the consistency of thoughts and actions?
7relied on parents as "experts" on their children?	RS EX			Difficulty in understanding whom was referred to as "experts."	relied on parents as "experts" on their children? In other words, do you believe that the parents are the ones who best know the child?
11let the parents choose when to receive information and what type of information they wanted?		RS EX		Difficulty in understanding the purpose of the question.	let the parents choose when to receive information and what type of information they wanted (for example, did you give them opportunity to ask questions of their interest at the moment they wanted)?

Continues...

Table 2 – Summary of cognitive interviews conducted with professionals about the quality of the MPOC-SP items

Question	Round 1	Round 2	Round 3	Detail of the problem found	Final writing of the question
12helped each family to maintain a stable relationship with at least one service provider who works with the child and its parents over a long period of time?		RS EX		Difficulty in understanding whether at least one team member monitored the child over a long period of time.	helped each family to maintain a stable link with at least one service provider who monitors the child and its parents over a long period of time?
18treated the parents as equals, rather than just as mother or father of a patient (e.g. not referring to them just as "Mom" and "Dad")?		EX RR		Difficulty in understanding the example of the question.	treated the parents as equals, rather than just in a generic way (e.g. not referring to them as "Mom" or "Dad" but calling them by their names)?
26gave opportunity for the whole family, including brothers, to obtain information?		EX		Difficulty in understanding the scope of "whole family" and doubts about the theme of the information provided.	gave opportunity for the whole family (everyone who coexists directly with the child), including brothers, to obtain information about the child?
27had general information available on different concerns (e.g. financial costs or care, genetic counseling, rest, courtship and sexuality)?		RS EX		The term "had" raised doubts, since the professionals understood that the question sought to know whether they (the professionals), not the family, has access to information. Doubts on the scope of the term "general" and on the examples.	provided extensive information on different concerns related to the children's reality (for example, financial costs or care, genetic counseling, rest, courtship and sexuality)?

Caption: RR: Requested repetition of response options; RS: Requested repetition of the statement; EX: Example requested.

## **DISCUSSION**

Translation and cross-sectional adaptation of questionnaires involved complex challenges to achieve a consistent writing with the original and as close as possible to the cultural reality of the country. For this, it is essential to address the language problems found in translated questionnaires to make questions more

precise and clear, in accordance with the original instrument. The cognitive interview has proved useful as a resource to identify understanding problems, enabling the correction of problems in MPOC-20 and MPOC-SP.

In the analysis of interviews, the similarity between difficulties related to MPOC-20 and MPOC-SP questions became evident. Since the questionnaires have

similar questions, the items considered more difficult were equivalent. This indicates that the translation and cross-cultural adaptation performed by the panel of experts were consistent in the items of each instrument, but not enough to make the item clear to interviewees, whether they were parents or professionals. Difficulties found indicate the importance of the verification through cognitive interviews to ensure the adequacy of the local version of foreign origin.

In addition to general difficulties with the linguistic style of the questions, it is possible that some of the gaps in understanding in terms of the MPOC-20 are associated with the lack of familiarity of caregivers with the meaning of technical terms, common among professionals but not among users of health services. Education was also relevant since the interviewees with lower educational level presented more difficulties. Since a large portion of the Brazilian population still has low educational levels, the systematic investigation of understanding in this study resulted in the adaptation of the questionnaires to the reality of the country. Thus, it is possible to cover more users, who will be able to evaluate the quality of the service through the MPOC-20. Regarding the MPOC-SP, apparently the difficulties were related to the lack of clarity in some terms of the questions, which led to doubts about their scope. The improvements in understanding each round of interviews, after the adjustments, was clear.

Considering that the socio-political context influences the empowerment regarding active participation in decisions of health services<sup>15</sup> and assuming that the country of origin of the questionnaire is significantly different o the Brazilian reality, the panel of experts considered the possibility of understanding difficulties and lack of relevance of the questionnaires objectives. However, during the interviews, the parents/caregivers and professionals understood that the instruments dealt about the partnership among them,

established by the provision of information and the respect to families. Thus, the doubts were limited to the linguistic formulation of the statements. In addition, the interviewers showed appreciation of the contents of the MPOC questionnaires, praising and talking about the importance of these matters to the quality of care.

This study presented limitations related to external factors to the instruments, which possibly influenced the responses. The presence f the child during the interviews with parents/caregivers interfered with the discussion of more difficult items, as the caregiver had to split the attention between the questionnaire and the child surveillance. Furthermore, overall, the professionals had little time available to participate in the study due to their work commitments, showing up in a hurry to discuss the questions. Therefore, ideally, interviews with the MPOC-20 and MPOC-SP in clinical situations should be done in previously scheduled times, with about 20 minutes dedicated only to this activity. Despite these limitations, all interviews served the purpose of the study, which was identifying complex items and correct them to enable a better understanding of the questionnaires.

### **CONCLUSION**

The cognitive interview proved to be indispensable as a tool to analyze the understanding of the MPOC-20 and MPOC-SP questionnaires, since it was essential to locate problems and enable the adjustments of questions, improving their understanding within the cultural context of the country. Knowing the interpretation of the interviewees about the questions was important to adjust them and, thus, to ensure that the translated questionnaires match the concepts of the original instruments, allowing to measure the extent to which the Brazilian child rehabilitation services are centered on the family.

## REFERENCES

- Epstein RM, Street RL. The values and value of patientcentered care. Ann Fam Med. 2011;9 (2):100-3. doi: 10.1370/afm.1239
- 2. Law M, Rosenbaum P, King G. Family-centred service sheets: 18 educational materials designed for parents, service providers, and organizations. CanChild Centre Childhood Disabil Res. 2003;29(5):357-66.
- 3. Leff PT, Walizer EH. Building the healing partnership: parents, professionals, and children with chronic illnesses and disabilities. J Pediatric Psychol. 1993;18(6):791-2. doi: 10.1093/jpepsy/18.6.791.
- 4. Salebey D. The strengths perspective in social work practice. White Plains. 1992;41(3):296-305. Doi: 10.1093/sw/41.3.296.

- Fewell RR, Vadasy PF. Measurement issues in studies of efficacy. Top Early Child Spec. 1987;7(2):85-96. doi: 10.1177/027112148700700209.
- King SM, Rosenbaum PL, King GA. Family-centered service for children with cerebral palsy and their families: a review of the literature. Semin Pediatr Neurol. 2004;11(1):78-86. doi: 10.1016/j.spen.2004.01.009.
- 7. Pfeiffer D. Too late, too little, or both? Disabil Rehabil. 2002;24(1):985-6. doi: 10.1080/09638210152049.
- King SM, Rosenbaum PL, King GA. Parents 'perceptions of caregiving: development and validation of a measure of processes. Dev Med Child Neurol. 1996;38(9):757-72. doi: 10.1111/j.1469-8749.1996.tb15110.x.
- Siebes RC, Nijhuis BJ, Boonstra AM, Ketelaar M, Wijnroks L, Reinders- Messelink HA, et al. A family-specific use of the Measure of Processes of Care for Service Providers (MPOC-SP). Clin Rehabil. 2007;22(3):242-51. doi: 10.1177/0269215507081568.
- Mcconachie H, Logan S. Validation of the measure of processes of care for use when there is no Child Development

- Centre. Child Care Health Dev. 2003;29(1):35-45. doi: 10.1046/j.1365-2214.2003.00314.x.
- King SM, Rosenbaum PL, King G. Evaluating health service delivery to children with chronic conditions and their families: Development of a Refined Measure of Processes of Care (MPOC–20). Children's Health Care. 2004;33(1):35-57. doi: 10.1207/s15326888chc3301 3.
- 12. CanChild. Measure of processes of care [cited 2016 Dec 05]. Available from: https://www.canchild.ca/en/resources/47-measure-of-processes-of-care.
- Coster WJ, Mancini MC. Recomendações para a tradução e adaptação transcultural de instrumentos para a pesquisa e a prática em Terapia Ocupacional. Rev Ter Ocup Univ São Paulo. 2015;26(1):50-7. doi: 10.11606/issn.2238-6149.
- 14. Beatty PC, Willis GB. Research synthesis: the practice of cognitive interviewing. Public Opin Q. 2007;71(2):287-311. doi: 10.1093/poq/nfm006.
- Carvalho SR. Os múltiplos sentidos da categoria "empowerment" no projeto de promoção à saúde. Cad Saúde Pública. 2004;20(4):1088-95. doi: 10.1590/ S0102-311X2004000400024.

Received: 12.20.2017 Accepted: 04.04.2018