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# Adaptation and content validation of the Brazilian version of the Posttraumatic Cognitions Inventory

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## ABSTRACT

**OBJECTIVE:** To translate, adapt and validate the contents of the Brazilian version of the Posttraumatic Cognitions Inventory.

**METHODS:** The process of translation and adaptation of the initial instructions and items involved five steps: (1) translation; (2) back translation; (3) correction and semantic adaptation; (4) content validation by professional experts (judges); and (5) test of final version through a verbal-numbered scale. As performance indicators for understanding, the scores of central tendency (mean) and dispersion (standard deviation) were calculated for each item in step 5. Satisfactory comprehension was defined as a mean score  $\geq 3$ .

**RESULTS:** The 36 questions and the initial instructions were translated and adapted to create the Brazilian version of the Posttraumatic Cognitions Inventory. In the final stage of testing, 45 adults answered the items and demonstrated an adequate understanding of the instrument in the verbal-numbered scale ( $M = 4.13$ ;  $dp = 0.11$ ).

**CONCLUSIONS:** The Posttraumatic Cognitions Inventory is an easily understood and semantically valid instrument. Further studies are needed to verify and evaluate the appropriateness of its psychometric properties for the Brazilian population.

**DESCRIPTORS:** Cognition, classification. Stress Disorders, Posttraumatic, classification. Translations. Questionnaires. Validation Studies.

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## INTRODUCTION

A traumatic event can be defined as experiencing, witnessing or facing a stressful situation in which life and/or safety of the victim or someone close to them is threatened.<sup>1,6</sup> There are many situations which could be considered traumatic/ the most common tend to be those in which some kind of violence occurs.<sup>7,24</sup>

Posttraumatic stress disorder (PTSD) is considered a chronic, recurring and incapacitating disorder.<sup>9,a</sup> It is an anxiety syndrome triggered by a traumatic situation, the symptoms of which include repeatedly reliving the event, avoidance, numbness, and increased excitability. Between 40% and 90% of individuals report having experienced at least one stressful, potentially traumatic event in the course of their life.<sup>27</sup>

The impact of stressful, traumatic events on individuals, particularly evident in the occurrence of PTSD, is associated with changes in the structure and function of the central nervous system.<sup>16,28,29</sup> These alterations can affect emotional, behavioral regulation and cognitive processes, interfering with the normal psychopathological course.<sup>22,23</sup>

The Posttraumatic Cognitions Inventory instrument, in its original and adapted versions, takes Foa et al's<sup>15</sup> 'Emotional Processing Theory' as its theoretical reference. *Traumatic events produce changes in the victims cognition of traumatic events,<sup>13,14</sup> which plays an important role in later emotional responses. PTSD is the result of a rupture in the normal process of memory retrieval.* For Foa & Kozak,<sup>12</sup> the extreme emotions experienced during a traumatic event lead to an association in the processing of information about events. This results in the disarray of recollections of memories inconsistent with the original memory. Traumatic memories are associated with danger stimuli which lead to a general perception of threat.<sup>13,14</sup> These memories encode a wide array of physiological responses and behaviors, which may be linked to feelings of helplessness when faced with a threat. This results in a general image of self as unable to face new situations. Such schematic representations play an important role in the onset and continuance of PTSD. The model proposed in this theory focuses on the representation of threat related to the traumatic event and explains how information is represented and processed in the cognitive system.<sup>8</sup> The central idea of this theory is that traumatic events modify a person's basic beliefs.<sup>15</sup> In fact, there is a general increase in negative beliefs about the self, the world and others.<sup>13</sup> When victims with PTSD are compared to those who do not develop this disorder, such changes in beliefs are notable.<sup>15</sup>

There are a considerable number of instruments to diagnose and track posttraumatic symptoms. In spite of this, there are few valid measures with which to quantify other factors which contribute to symptomatic manifestations, such as posttraumatic cognitions. Among the instruments, the Personal Beliefs and Reactions Scale (PBRs)<sup>b</sup> identifies personal evaluations and reactions and the World Assumptions Scale<sup>20,21</sup> gives access to assessments of the world in general, although there are no Brazilian versions of these scales. Before these instruments can be used, studies of their translation, adaptation and validation of the psychometric properties are necessary, as cultural variation may have an impact on the results.

Foa et al<sup>15</sup> developed the PTCI instrument based on clinical observations and recent theories of posttraumatic psychopathology. The PTCI is an inventory which the individual completes themselves, giving scores to cognitions which may be related to a traumatic event using a seven point Likert scale from 1 (totally disagree) to 7 (completely agree). Three specific areas of posttraumatic cognitions are investigated: Negative Cognitions about Self, Negative Cognitions about the World, and Self-Blame.<sup>15</sup> The instrument is based on the assumption that those individuals who come to view the world as a threatening place after a traumatic event tend to blame themselves for what happened and, if they also have a negative view of themselves, are predisposed to develop PTSD. Posttraumatic cognitions would be directly related to posttraumatic symptoms.<sup>14,15</sup>

Foa et al<sup>15</sup> identified adequate psychometric properties for the PTCI, including reliability and validity. With regards to reliability, the PTCI shows a high level of internal consistency in the three domains examined: (a) negative cognitions about self ( $\alpha = 0.97$ ); (b) negative cognitions about the world ( $\alpha = 0.88$ ) and (c) self-blame ( $\alpha = 0.86$ ). The PTCI shows temporal stability. The (Spearman) correlation coefficient was between 0.74 and 0.86 after analyzing the test-retest reliability with an interval of one week. With regards to validity, stable factor structure was observable in three different sample groups. There were high correlations between PTCI and two other instruments used to evaluate posttraumatic cognitions: (a) PBRs<sup>b</sup> and (b) World Assumptions Scale,<sup>20,21</sup> indicating convergent validity. The association between posttraumatic cognitions and posttraumatic psychopathology in discriminant validity was calculated.

The psychometric properties of the PCTI were investigated by Beck et al<sup>3</sup> and the factorial structure of the

<sup>a</sup> Schaefer LS. Avaliação de reações pós-traumáticas em bancários vítimas de ataques a bancos [dissertação de mestrado]. Porto Alegre: Programa de Pós-Graduação em Psicologia da Pontifícia Universidade Católica do Rio Grande do Sul; 2011.

<sup>b</sup> Resick PA, Schnicke MK, Markway BG. The relationship between cognitive content and posttraumatic stress disorder. Presented at the Annual Meeting of the Association for Advancement of Behavior Therapy; 1991; New York, USA.

instrument examined using a sample of 112 individuals aged between 18 and 65. It was found to be reliable. The study corroborates the assumption that the PTCI is a promising instrument for predicting the risk of developing PTSD in victims of traumatic experiences.

Emmerik et al<sup>11</sup> investigated the psychometric characteristics of the Dutch version of the PTCI with 185 subjects who had experienced some kind of traumatic event according to the criteria described in the *DSM-IV-TR*.<sup>1</sup> The study had high overall internal consistency ( $\alpha = 0.97$ ) and for the various subscales (between 0.86 and 0.97), and after two weeks in the test-retest. The convergent validation achieved high correlation after comparing the PTCI with the PBRs.<sup>b</sup> With regards to the discriminant validity, the scale was capable of separating traumatized patients with and without PTSD diagnoses. The PTCI may be significantly useful in measuring Posttraumatic beliefs which should be modified throughout the course of these patients' treatment. There is no Brazilian version of the PTCI available. This study aimed to translate, adapt and validate the contents of a Brazilian version of the Posttraumatic Cognitions Inventory (PTCI).

## METHODS

The translation and adaptation process had five stages. Participants were recruited for convenience. The recruitment took place through personal contact with the researchers, either in person or by e-mail. There were no refusals to participate and nor were there any losses at any of the study's stages.

The translation and adaptation process of the PTCI instructions and items had five stages: (1) translation; (2) back-translation; (3) correction and semantic adaptation; (4) validation of the contents by professionals in the area (judges) and (5) test of the final version, using a verbal-numerical scale.<sup>2,5,18,19,25,c</sup> In the translation and adaptation into Portuguese, the procedures aimed at measuring constructs relating to the topic of trauma, such as the Childhood Trauma Questionnaire<sup>17</sup> e o Abuse Assessment Screen<sup>26</sup> were considered.

*Stage 1: Translation.* The translation from the original language, English, into Portuguese (T1 and T2) was carried out independently by two professionals, a graduate and post-graduate in Journalism and another post-graduate in Literature. Both were living in English speaking environments, with mastery and fluency of the language.

*Stage 2: Back-translation.* The Portuguese versions of the instrument were then translated back into English (R1 and R2), independently. This stage was carried

out by two bilingual professionals with doctorates in the area of Psychology, resident in Brazil and with experience of living in English speaking countries and of creating and validating instruments.

*Stage 3: Technical revision and semantic equivalence.* In a meeting of 12 people ( a doctor of Psychology, six post-graduate students and five Psychology undergraduates) with experience in Psychology research and in PTSD, an analysis of the translations' semantic equivalence (T1, T2, R1 and R2), and the general significance of each question in relation to the corresponding question in the original instrument was carried out.

The analysis of semantic equivalence involves the equivalence in meaning between the original and the translated versions, as an appropriate translation for words from a given language does not always exist.<sup>18</sup> The verb tenses used was one category of analysis at this stage, as the tense should be the same in the original and translated version. Reports were produced synthesizing the discussions of each of the versions (T1,T2, R1 and R2).

*Stage 4: Validation of contents by professionals in the area (judges).* Eight judges with experience of creating instruments and on the topic of PTSD (seven psychologists and psychiatrist, post-graduates in Psychology) analyzed both back-translations. The reports mentioned above consolidated the versions of the questionnaire and developed the final version (F) to be evaluated in the following stage.

*Stage 5: Test of final version.* This final version (F) was given to 45 Brazilian adults. A verbal-numerical<sup>2</sup> scale of five points was used to evaluate comprehension of the instrument as a whole and of each question in isolation, using the question: "Did you understand what was asked?". The response "I didn't understand anything" corresponded to the lowest value, "1" and "I understood perfectly" corresponded to the maximum value, which was "5".

The central tendency (mean) and dispersion (standard deviation) scores were calculated for each item as performance indicators of comprehension. Satisfactory comprehension called for a mean score of  $\geq 3$ . A table of comparisons, (Table) including all versions (T1, T2, R1, R2, F) was sent to the principal author of the PTCI<sup>15</sup> for approval.

The ethical procedures followed those recommended by Resolution 16/2000 of the Federal Council of Psychology, and Resolution 196 of the National Health Council. This study was approved by the Scientific Commission of the *Faculdade de Psicologia* and by the Ethical Research Committee of the *Pontifícia Universidade Católica, Rio*

<sup>c</sup> International Test Commission. International Test Commission guidelines for translating and adapting tests. [s.l.]; 2010 [cited 2013 May 5]. Available from: <http://www.intest.com.org>

**Table.** Evaluation of the semantic equivalence between the original, English instrument (O), the first version translated into Portuguese (T1), the first back-translated version into English (R1), the second version translated into Portuguese (T2), the second back-translated version into English (R2) and the final version in Portuguese (F).

O	T1	T2	R1	R2	F
1. The event happened because of the way I acted	1. O evento aconteceu devido à forma com que eu agi	1. O evento aconteceu por causa da maneira como agi	1. The event happened because of the way I acted	1. The event had happened due to my actions/behavior	1. O evento aconteceu por causa da forma como eu agi
2. I can't trust that I will do the right thing	2. Eu não confio que eu vou fazer a coisa certa	2. Eu não posso crer que farei a coisa certa	2. I don't trust I am going to do the right thing	2. I cannot believe that I will do the right thing	2. Eu não posso confiar que farei a coisa certa
3. I am a weak person	3. Eu sou uma pessoa fraca	3. Eu sou uma pessoa fraca	3. I am a weak person	3. I am a weak person	3. Eu sou uma pessoa frágil
4. I will not be able to control my anger and will do something terrible	4. Eu não serei capaz de controlar minha raiva e farei algo terrível	4. Eu não conseguirei controlar minha raiva e farei algo terrível	4. I won't be able to control my angry and I am going to do something terrible	4. I will not control my anger and I will do a terrible thing	4. Eu não serei capaz de controlar minha raiva e farei algo terrível
5. I can't deal with even the slightest upset	5. Eu não consigo lidar nem mesmo com pequenos aborrecimentos	5. Eu não sei lidar nem com o mínimo aborrecimento	5. I can't deal with even small annoyances	5. I don't know how to deal even with a minimum hassle	5. Eu não consigo lidar nem mesmo com pequenos aborrecimentos
6. I used to be a happy person but now I am always miserable	6. Eu costumava ser uma pessoa feliz, mas agora estou sempre triste	6. Eu costumava ser uma pessoa feliz, mas agora estou sempre deprimido	6. I use to be a happy person but now I am always sad	6. I was used to be a happy person, but now I am always depressed	6. Eu costumava ser uma pessoa feliz, mas agora estou sempre infeliz
7. People can't be trusted	7. As pessoas não são confiáveis	7. Não se pode confiar nas pessoas	7. People are not trusty	7. We cannot trust on people	7. As pessoas não são confiáveis
8. I have to be on guard all the time	8. Eu tenho que ser sempre cauteloso	8. Eu tenho que estar atento o tempo inteiro	8. I must be cautiously all the time	8. I have to be alert all the time	8. Eu tenho que estar alerta o tempo inteiro
9. I feel dead inside	9. Eu me sinto morto por dentro	9. Eu me sinto morto por dentro	9. I feel like I am dying inside	9. I feel like I was dead	9. Eu me sinto morto por dentro
10. You can never know who will harm you	10. Você nunca sabe quem vai lhe machucar	10. Você nunca pode saber quem irá lhe prejudicar	10. You never know who will hurt you	10. You can never know who will prejudice you	10. Você nunca sabe quem vai lhe prejudicar
11. I have to be especially careful because you never know what can happen next	11. Eu tenho que ser especialmente cuidadoso, pois nunca se sabe o que pode vir a acontecer	11. Eu tenho que ser especialmente cuidadoso, porque você nunca sabe qual será o próximo acontecimento	11. I must be especially careful as one never knows what can happen	11. I have to be especially careful because you can never know what is going to happen	11. Eu tenho que ser especialmente cuidadoso, pois nunca se sabe o que pode vir a acontecer
12. I am inadequate	12. Eu sou inadequado	12. Eu sou inadequado	12. I am inadequate	12. I am inadequate	12. Eu sou inadequado
13. I will not be able to control my emotions, and something terrible will happen	13. Eu não serei capaz de controlar minhas emoções e algo terrível vai acontecer	13. Eu não conseguirei controlar minhas emoções e algo terrível irá acontecer	13. I won't be able to control my emotions and something terrible is going to happen	13. I will not be able to control my emotions and something terrible Will happen	13. Eu não serei capaz de controlar minhas próprias emoções e algo terrível irá acontecer
14. If I think about the event, I will not be able to handle it	14. Se eu penso sobre o evento, eu não serei capaz de lidar com ele	14. Se eu pensar sobre o evento, eu não conseguirei lidar com ele	14. If I think about the event, that's because I won't be able to deal with it	14. If I think of the event, I will not be able to deal with it	14. Se eu pensar sobre o evento, não serei capaz de lidar com ele

Continue

## Continuation

O	T1	T2	R1	R2	F
15. The event happened to me because of the sort of person I am	15. O evento ocorreu devido ao tipo de pessoa que eu sou	15. O evento aconteceu comigo por causa do tipo de pessoa que sou	15. The event happened because of the kind of person I am	15. The event happened with me due to my way of being	15. O evento aconteceu comigo por causa do tipo de pessoa que eu sou
16. My reactions since the event mean that I am going crazy	16. Minhas reações desde o evento significam que estou ficando louco	16. Minhas reações desde o evento significam que estou ficando louco	16. The reactions I am having since the event mean I am getting crazy	16. My reactions since the event mean that I am getting crazy	16. Minhas reações, desde o evento, significam que estou ficando louco
17. I will never be able to feel normal emotions again	17. Eu nunca serei capaz de sentir emoções normais novamente	17. Eu nunca mais conseguirei sentir emoções normais outra vez	17. I will never be able to experience to fell normal emotions anymore	17. I will never be able to feel normal emotions another time	17. Eu nunca serei capaz de sentir emoções normais novamente
18. The world is a dangerous place	18. O mundo é um lugar perigoso	18. O mundo é um lugar perigoso	18. The world is a dangerous place	18. The world is a dangerous place	18. O mundo é um lugar perigoso
19. Somebody else would have stopped the event from happening	19. Outra pessoa teria evitado que o evento ocorresse	19. Outra pessoa haveria impedido o acontecimento do evento	19. Another person would avoid it from happen	19. Another person would have avoided the occurrence of the event	19. Outra pessoa teria evitado que o evento acontecesse
20. I have permanently changed for the worse	20. Eu mudei para pior permanentemente	20. Eu estou permanentemente mudado para pior	20. I permanently changed for worst	20. I am permanently changed for a worse way	20. Eu mudei permanentemente para pior
21. I feel like an object, not like a person	21. Eu me sinto como um objeto, não como uma pessoa	21. Eu me sinto como um objeto, não como uma pessoa	21. I fell like I was an object, not a person	21. I feel like an object, not like a person	21. Eu me sinto como um objeto, e não como uma pessoa
22. Somebody else would not have gotten into this situation	22. Outra pessoa não teria se colocado nessa situação	22. Outra pessoa não haveria se metido nessa situação	22. Another person wouldn't put himself in the same situation	22. Another person would not be involved in a situation like this one	22. Outra pessoa não teria se envolvido nessa situação
23. I can't rely on other people	23. Eu não posso contar com outras pessoas	23. Eu não posso contar com outras pessoas	23. I can't count on people	23. I cannot stand by other people	23. Eu não posso contar com outras pessoas
24. I feel isolated and set apart from others	24. Eu me sinto isolado e afastado dos outros	24. Eu sinto-me isolado e distante das outras pessoas	24. I fell isolated and distant from people	24. I fell alone and far from other people	24. Eu me sinto isolado e distante das outras pessoas
25. I have no future	25. Eu não tenho futuro	25. Eu não tenho futuro	25. I have no future	25. I do not have future	25. Eu não tenho futuro
26. I can't stop bad things from happening to me	26. Eu não posso evitar que coisas ruins aconteçam comigo	26. Eu não consigo impedir coisas ruins de acontecerem comigo	26. I can't avoid bad things from happen to me	26. I am not able to avoid the occurrence of bad things with me	26. Eu não posso evitar que coisas ruins aconteçam comigo
27. People are not what they seem	27. As pessoas não são o que elas parecem	27. As pessoas não são o que parecem	27. People aren't what they look like	27. People are not as they seem to be	27. As pessoas não são o que parecem
28. My life has been destroyed by the trauma	28. Minha vida foi destruída pelo trauma	28. Minha vida foi destruída pelo trauma	28. The trauma destroyed my life	28. My life was destroyed by the trauma	28. Minha vida foi destruída pelo trauma
29. There is something wrong with me as a person	29. Tem alguma coisa errada comigo como pessoa	29. Não há nada de errado comigo como pessoa	29. Something is wrong with me	29. There is nothing wrong with me as a person	29. Tem alguma coisa errada comigo como pessoa

Continue

## Continuation

O	T1	T2	R1	R2	F
30. My reactions since the event show that I am a lousy copier	30. Minhas reações desde o evento demonstram que eu não sei lidar com situações	30. Minhas reações desde o evento mostram que sou um mau lidador	30. Since the event my reactions demonstrate that I can't deal with some situations	30. My reactions since the event show that I do not deal well with bad things	30. Minhas reações desde o evento demonstram que eu sou péssimo em enfrentar algumas situações
31. There is something about me that made the event happen	31. Tem alguma coisa a meu respeito que fez com que esse evento acontecesse	31. Há algo em mim que fez o evento acontecer	31. There is something about me that made that event to happen	31. There is something related to me that had made the event happen	31. Há algo em mim que fez com que o evento ocorresse
32. I will not be able to tolerate my thoughts about the event, and I will fall apart	32. Eu não serei capaz de tolerar meus pensamentos sobre esse evento e eu vou desmoronar	32. Eu não conseguirei tolerar meus pensamentos sobre o evento, e desabarei	32. I won't be able to deal with my thoughts about the event and I think I will fall apart	32. I will not be able to tolerate my thoughts about the event, and I will be down	32. Eu não serei capaz de tolerar meus pensamentos sobre o evento e vou desmoronar
33. I feel like I don't know myself anymore	33. Eu sinto como se não me conhecesse mais	33. Eu sinto que não conheço mais a mim mesmo	33. I feel like I don't recognize myself anymore	33. I fell that I do not recognize myself anymore	33. Eu sinto como se não me conhecesse mais
34. You never know when something terrible will happen	34. Você nunca sabe quando algo terrível vai acontecer	34. Você nunca sabe quando algo terrível acontecerá	34. You never know when something terrible is going to happen	34. You never know when a terrible thing will happen	34. Você nunca sabe quando algo terrível vai acontecer
35. I can't rely on myself	35. Eu não posso contar comigo	35. Eu não posso contar comigo mesmo	35. I can't count on me	35. I cannot stand my myself	35. Eu não posso contar comigo mesmo
36. Nothing good can happen to me anymore	36. Mais nada de bom pode me acontecer	36. Nada de bom pode acontecer comigo novamente	36. Any other good can happen to me	36. No good things can happen to me again	36. Nada de bom pode acontecer comigo novamente

*Grande do Sul* (CEP-PUCRS) (Process nº 08/04489). Participants signed consent forms after receiving a detailed explanation of the aims, procedures, risks and benefits of participating in the research.

## RESULTS

The instructions for the items were translated independently by two professionals in the translation stage. Item 26, in the original, is expressed in the statement “*I can't stop bad things from happening to me*”. The translation process generated two results: “*I can't avoid bad things happening to me – Eu não posso evitar que coisas ruins aconteçam comigo*” (T1) and “*I can't prevent bad things happening to me – Eu não consigo impedir coisas ruins de acontecerem comigo*” (T2) (Table).

The back-translation stage consisted in returning T1 and T2 into English. T1 was translated as “*I can't avoid bad things from happen to me*” (R1) and T2 as “*I am not able to avoid the occurrence of bad things with me*” (R2).

In the technical revision and semantic equivalence stage, it was verified that it was not necessary to modify the instrument's original instructions. With regards the scale of points, e.g., instead of using the term “neutral- neutro”, it was decided to use “neither agree nor disagree – *nem concordo nem discordo*”, as the literal translation was not appropriate.

No problems with the verb tenses were identified in the translated version. The verbs were translated into the past simple, the present perfect, the present and the future according to the tense used in the original instrument: “*Eu não tenho futuro*” (“*I have no future*”).

In order to produce the final version (F), in the content evaluation stage, the judges considered the aspects highlighted in the previous stages. The option “neutral” on the Likert scale for PTCI responses was modified from the original version. Terms such as “neutro – neutral” were avoided in the interest of being able to use the instrument with populations with low levels of

schooling. The term “neither agree nor disagree – *não concordo nem discordo*” proved to be closer in meaning and to the Brazilian reality.

In the third item, the term “weak” would translate literally as “*fraca*”. Although literally correct it is not really equivalent in this situation. Instead, it was decided that the term “fragile – *fragil*” should be used, as it would have more meaning for the respondent. In the 30<sup>th</sup> item, the expression “*My reactions since the event show that I am a lousy copier*” was translated as “*My reactions since the event show that I am terrible at dealing with certain situations – Minhas reações desde o evento demonstram que eu sou péssimo em enfrentar algumas situações*”, as the literal translation into Portuguese was not considered appropriate.

In the final stage (testing the final version) the instrument was given to a sample of 45 Brazilian adults from the general population, with an average level of schooling of seven years in school (7.84, sd = 2.23 years). The results of this stage show that the means for understanding on the verbal-numerical scale (1 to 5 points) were above 4.10 for all of the PTCI items, including the instructions at the beginning. The assessment of total comprehension was, on average, 4.23 (sd = 0.21). The items scored > 4, indicating good understanding of the instrument. Items 12 (4.16; sd = 0.59), 14 (4.13; sd = 0.43), 16 (4.20; sd = 0.80), 17 (4.21; sd = 0.42) and 35 (4.22; sd = 0.44) had lower means for understanding and the greatest disparity in responses, possibly due to their more subjective character in conceptual terms.

The final version of the PTCI in Portuguese is available in RSP, on-line version in Portuguese.

## DISCUSSION

The Brazilian version of the PTCI is an easily understood and semantically valid instrument, able to be used in investigating Posttraumatic cognitions. Efforts should be made to evaluate its psychometric properties, as presenting a translated version means little in terms

of validity and reliability. It is necessary to verify appropriateness and adaptation to the cultural context of the population in question.<sup>26</sup> In addition to the translation and back-translation of the original instrument, a semantic evaluation was also carried out, together with discussion between professionals in the area studied, as was a test with the population. Without this, adapting the instrument has no meaning and the instrument is limited to referential meaning.

There is still little research involving the adaptation and validation of instruments and, in Brazil, they are limited to contexts different to that of psychopathology. The PTCI is an instrument which may aid understanding of the individual's cognitive processing after experiencing a traumatic event.

PTCI should not be seen as a diagnostic instrument, as the original instrument was not designed for this. However, it may be a useful tool in investigating predictive beliefs related to PTSD and can be used as a research instrument in adults, as well being one more useful clinical evaluation instrument.

As part of the content validation process, one of the limitations of this study was that the final version was not used with the target population. The adaptation analysis of the final version was based on agreement criteria. Using the final version with the target population as completion of the PTCI content validation process, and studies of its psychometric properties will be conducted as part of future research.

It is vitally important that health care professionals have access to an instrument like the PTCI, which has proved reliable in accessing post-traumatic cognitions and helping identify individuals at increased risk of developing the disorder.<sup>3,4,10</sup> It is important to assess factors which may contribute significantly to prevention, bearing in mind the large number of people in the general population who are exposed to traumatic events and susceptible to developing PTSD throughout the course of their lives.

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