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Adaptation and evidence of validity of the Traumatic Grief Inventory for Brazil

Adaptação e evidências de validade do Traumatic Grief Inventory para o Brasil

Adaptación y evidencia de validez del Traumatic Grief Inventory para Brasil

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Abstract

The aim of the this study was to verify the evidence of validity of the reduced version adapted for Brazilian Portuguese of the Traumatic Grief Inventory, through confirmatory factor analysis and relationship with external variables, in addition to assessing the reliability and presence of invariance. The first step consisted of the adaptation and evaluation by expert judges of the translated version. After the evaluation, the pilot version was answered by five participants of the target population, for semantic and content evaluation, being named, in Brazil, as the Inventário de Luto Traumático (ILT-BR). Then, 211 Brazilians, who went through a grieving process, answered the following instruments: Sociodemographic Questionnaire, Mental Health Self-Perception Questionnaire, and ILT-BR. The ILT-BR presented good fit indexes and reliability, positively correlated with stress, fear, and obsessive thoughts, with no invariance found. From these results, we concluded that the ILT-BR is suitable for use in Brazil.
Keywords: death; psychological assessment; mental health; grief; psychometric properties; factorial analysis

Resumo

O objetivo do presente estudo foi verificar as evidências de validade da versão reduzida adaptada para o português do Brasil do Traumatic Grief Inventory, por meio de uma análise fatorial confirmatória e relação com variáveis externas, além de aferir a precisão e presença de invariância. A primeira etapa consistiu na adaptação e avaliação por juízes especialistas da versão traduzida. Após a avaliação, a versão piloto foi aplicada em cinco participantes da população-alvo para avaliação semântica e de conteúdo, sendo nomeado de Inventário de Luto Traumático (ILT-BR). Em seguida, 211 brasileiros, que passaram por um processo de luto, responderam aos seguintes instrumentos: Questionário Sociodemográfico, Questionário de Autopercepção de Saúde Mental e ILT-BR. O ILT-

BR apresentou bons índices de ajuste e precisão, se correlacionando positivamente com estresse, medo e pensamentos obsessivos, sem variação entre grupos. A partir destes resultados, conclui-se que há evidências de que o ILT-BR apresenta boas propriedades psicométricas.
Palavras-chave: morte; avaliação psicológica; saúde mental; luto; propriedades psicométricas; análise fatorial

Resumen

El objetivo de este estudio fue verificar la evidencia de validez de la versión reducida adaptada al portugués brasileño del Traumatic Grief Inventory (Inventario de Duelo Traumático), mediante un análisis factorial confirmatorio y la relación con variables externas, además de evaluar la precisión y presencia de invarianza. El primer paso fue la adaptación y evaluación por jueces expertos de la versión traducida. Después de la evaluación, se aplicó la versión piloto a cinco participantes de la población objetivo para la evaluación semántica y de contenido, denominándose Inventario de Luto Traumático (ILT-BR). Luego, 211 brasileños, que pasaron por un proceso de duelo, respondieron los siguientes instrumentos: Cuestionario Sociodemográfico, Cuestionario de Autopercepción de Salud Mental e ILT-BR. El ILT-BR mostró buenos índices de ajuste y precisión, correlacionándose positivamente con el estrés, el miedo y los pensamientos obsesivos, sin encontrar variación entre grupos. A partir de estos resultados, se concluye que el ILT-BR posee propiedades psicométricas adecuadas para su uso en Brasil.
Palabras clave: muerte; evaluación psicológica; salud mental; luto; análisis factorial; propiedades psicométricas

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All people will, at some point in their lives, go through a grieving situation when they lose someone close. However, this becomes problematic and can affect the individual's mental health when it is prolonged and there is a difficulty in getting over the loss. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, American Psychiatric Association [APA], 2013), grief is characterized by an intense yearning for the deceased person, and intense sadness and emotional pain can also occur when remembering the person who died or the circumstances of the death. When these feelings become prolonged, normal grief become persistent grief, and it can turn into Persistent Complex Grief Disorder (PCGD) (APA, 2013; Maciejewski et al., 2016), with symptoms persisting afterward one year.

The PCGD involves persistent grief over the loss, which can be associated with frequent crying and feelings of sadness, as well as concerning about how the death occurred. In addition, other situations can also occur, which are also criteria for the presence of the PCGD, such as: difficulty in accepting the death, disbelief that the other is dead, distressing memories, anger for the loss, desire to die to be close to the deceased, isolation, feeling that lost part of their identity and difficulty in engaging and planning for the future. Finally, the last criterion for the PCGD is an impairment in the functioning of daily activities or clinically significant suffering, directly influencing the individual's mental health (APA, 2013; Boelen & Smid, 2017; Maciejewski et al., 2016; Prigerson et al. al., 2009).

However, despite being included in the DSM-5 (APA, 2013), PCGD was only included as a disorder in the latest version and in the part that focus on assessment instruments and emerging models, showing that further studies are still needed. In view of this, one possibility to expand knowledge in the area is with the development of measures that organize the diagnostic criteria, so that they can be measurable and, in the future, can help in the clinical identification and interventions for this population (American Educational Research Association [AERA] et al., 2014).

Seeking to address this gap, Boelen and Smid (2017) built, in the Netherlands, a self-report instrument named The Traumatic Grief Inventory Self-Report Version (TGI-SR), with the purpose of assess the presence of persistent complex grief. For this, they conducted a study with 327 patients from a mental health service for people with trauma related to grief, and found evidence of internal structure and based on the relationship with external variables. The reduced version of the instrument, which will be the focus of this study, has 11 items with a unifactorial structure and excellent accuracy value (alpha coefficient = .93). Furthermore, the instrument showed a positive correlation with the presence of psychopathology indicators and a negative correlation with quality of life.

Subsequently, the authors conducted another study, with people grieving over a natural situation (n = 168), but also with people grieving over a plane crash (n = 167). The aim was to increase validity evidence for the TGI-SR (Boelen et al., 2018). In the 2018 study, they also found a unifactorial structure for the reduced version of the instrument, with factor loadings above .60, Cronbach's Alpha = .93 and correlation with psychopathology index, such as the presence of obsessive-compulsive thoughts, depressive symptomatology, somatization, and anxiety. The correlations found were of moderate to strong magnitude. The authors also found, in the second article, temporal stability for the instrument through test and retest in 15 participants.

Subsequently, the TGI-SR was also adapted for use in Turkey (Baş et al., 2020). The Turkish version was answered by 311 participants who went through a bereavement situation. As a result, the TGI-SR, adapted for Turkey, showed a good accuracy index (Cronbach's Alpha = .94) and validity evidence based on the relationship with external variables (depression, stress, and anxiety). The correlation magnitudes between the TGI-SR and the external variables ranged from moderate to strong. In Brazil, however, there is a lack of measures with good psychometric properties to assess the presence of persistent complex grief. Dahdah et al. (2019), in a literature review, found that mostly studies related to grief were conducted with qualitative measures and without evidence of validity.

Considering this gap, the aim of the present study is to verify the validity evidence of the short version of the Traumatic Grief Inventory, adapted to Brazilian Portuguese (Boelen & Smid, 2017). The specific objectives were to verify: (a) evidence of validity based on the content (b) evidence of internal structure (confirmatory factor analysis); (c) validity evidence related to external variables (social phobia; stress; fear); (d) the instrument's accuracy values and (e) whether the instrument could also be applied in a sample grieving the loss of someone death by COVID-19. As a guiding hypothesis, it was expected that the one-factor structure would present good fi index and accuracy, and a positive relation with the presence of social phobia, stress and fear (APA, 2013; Baş et al., 2020; Boelen & Smid, 2017; Boelen et al., 2018; Lee & Neimeyer, 2020).

To describe the process of adaptation and research for evidence of validity (Borsa & Seize, 2017; Van de Vijver, 2016), this study was divided into two stages. In the first, the process of adaptation to Brazilian Portuguese and the search for evidence of validity based on the content will be described, and in the second stage, the search for evidence of internal structure, based on the relationship with external variables, measures of

accuracy of the TGI -SR Brazilian version and analysis of invariance in relation to participants grieving because of COVID-19 or not, will be described too.

The instrument can be used in Brazil to promote studies in grieving and mental health, as well as to support interventions with people who have lost someone verifying if the grief presented is, in fact, pathological and needs intervention or if the symptoms presented are within the expected.

Ethical aspects

The project was approved by the Methodist University of São Paulo Ethics Committee. The procedures of the present study complied with the provisions of the Declaration of Helsinki. All participants, in both stages, received information about the research aim, the activities to be developed and their rights, before signing the Free and Informed Consent Form. Everyone's identity was kept confidential.

Stage 1

Content-based validity evidence

The first step consisted in obtaining authorization from the authors of the Traumatic Grief Inventory (Boelen & Smid, 2017) for translation the instrument to Brazilian Portuguese. Then, the semantic and cultural adaptation of the instrument was conducted in the following order: (a) independent translation by two translators, (b) content analysis of the items by a committee with two expert judges to generate the synthesis version of the instrument; and (c) semantic analysis of the instrument by five people from the target population, 2 with high school education and 3 with higher education, to verify if they understood the translated items and if there was any suggestion for improvement. If there was any suggestion, the instrument would be returned to the two expert judges who assessed the pertinence of the suggestion. However, all participants understood the items and the form of application well, which was demonstrated by content validity indices higher than CVI = .90 for all items (Alexandre & Coluzi, 2011). Thus, a new evaluation by the experts was not necessary (Borsa & Seize, 2017). Additionally, two cognitive interviews conducted, also with the target population, focused on assessing the cognitive process throughout the response to the instrument (Van de Vijver, 2016). All steps were successfully performed and the version after the instrument adaptation process is shown in table 1, named Traumatic Grief Inventory (ILT-BR).

Table 1
Items from the Traumatic Grief Inventory adapted to Brazilian Portuguese

Item	Items (English)	Items (Brazilian Portuguese)
1	I felt a strong longing or yearning for the deceased.	Senti muita saudade e vontade de ver a pessoa que se foi.
2	I felt confusion about my role in life, or a diminished sense of identity.	Eu me senti confuso (a) sobre meu papel na vida, perdendo parte da minha identidade.
3	I had trouble to accept the loss.	Tive dificuldades em aceitar a perda.
4	I avoided places, objects or thoughts reminding me of his/her death.	Eu evitei lugares, objetos ou pensamentos que me lembrassem da pessoa que se foi.
5	I found it difficult to trust others.	Eu achei difícil confiar nos outros.
6	I felt bitter or angry about the loss.	Eu me senti amargurado(a) ou com raiva pela minha perda.
7	I experienced difficulty to move on with my life (e.g., pursue friendships, activities).	Senti dificuldade em seguir em frente com minha vida (por exemplo, encontrar amigos, realizar atividades, etc.).
8	I felt numb over the loss.	Eu me senti estagnado (a) após minha perda.
9	I felt that life is meaningless or empty without the deceased.	A minha vida ficou sem sentido e vazia desde que a pessoa se foi.
10	I felt shocked or stunned by his/her death.	Eu fiquei em choque pela perda da pessoa que se foi.
11	I noticed that my functioning (in my work, private life, and/or social life) was seriously impaired as a result of his/her death.	Percebi que não conseguia fazer mais nada do que precisava (no meu trabalho e/ou vida particular e/ou vida social) após a perda da pessoa que se foi.

Stage 2

Validity evidence based on the internal structure and relationship with other variables and accuracy of the TGR-SI

Method

Participants

A total of 211 Brazilians from the general community participated in this study, with a mean age of 37 years (*SD* = 13). Most were women (73 %), declared themselves white (75 %), followed by browns (15 %), blacks (3 %), yellow (2 %) and others (4 %). Regarding schooling, 12 % had completed high school, 42 % had higher education and 43 % had attended a postgraduate course. Among the participants, 3 % did not answer their level of education. As an inclusion criterion, they should have gone through some grieving situation in their life and responded to the instrument according to what they felt at the time they experienced grief. The study sample was for convenience and non-probabilistic, the statistical power found was 0.95 with alpha error at 0.05 and small to moderate effect size (0.20 ~ 0.25) in the posterior estimation (Faul et al., 2007).

Instruments

Sociodemographic Questionnaire. Questionnaire developed by the researchers to collect sociodemographic data, such as schooling, income, age and racial identity. The last question of the questionnaire referred to the loss of a closed one because of the Covid-19 pandemic: “Have you experienced any loss of a closed one due to the pandemic?”. The response scale for this question was a two-point from 1 (*yes*) to 2 (*no*).

Mental Health Self-Perception Questionnaire. Brief self-report questionnaire, with three questions, prepared by the researchers and based on specific literature in the area (APA, 2013; Carver & Connor-Smith, 2010; Elizur & Shye, 1990) to describe the general mental health conditions of the participants. The following signs and symptoms were questioned: (a) obsessive thoughts; (b) excessive stress; (c) excessive fear, through the following questions: "Have you avoided social situations, including general obligations (work, leisure, living with family members, etc.), for fear of getting sick"; "Have you been feeling extremely stressed with difficulties performing your day-to-day activities?" and "Have you felt paralyzed, terrified, and too afraid to face an everyday situations and getting sick?". The response scale for these questions was a five-point from 1 (*never*) to 5 (*always*).

Traumatic Grief Inventory (ILT-BR). This is the Brazilian version of the Traumatic Grief Inventory (Boelen & Smid, 2017), adapted in the previous stage of this study. The instrument aims to assess the presence of persistent grief by part of the participants of this study. The translated version has eleven items, and the answers are possible in five points, which can be: *never*, *rarely*, *sometimes*, *many times* and *always*. The participant must indicate how he/she felt when he/she lost a close person, considering the situation reported in the item. The items are shown in Table 1. Regarding the psychometric properties, the instrument presented Cronbach's Alpha of 0.93 in its original version built by Boelen and Smid (2017).

Procedures

Initially this research was submitted to the Ethics and Research Committee of the Universidade Metodista de São Paulo. After the approval, the instruments were organized on the digital platform Google Forms. Then, the recruitment of participants occurred online, on social media such as Facebook and WhatsApp, in addition to invitations from people close to the researchers of this study in their institutions of origin. To participate, they were asked to access the Google Forms link after the researchers provided the link. On the first page, there was an explanation of the study, as well as ethical issues and contact of the researchers, in case they wished to clarify any doubts. After reading the information, they should click agreeing to participate, to have access to the next page and the data collection, in fact, start. After agreeing, the instruments were made available in the following order: Sociodemographic Questionnaire, Mental Health Self-Perception Questionnaire and Traumatic Grief Inventory (ILT-BR). The average time of participation in the survey was about 30 minutes.

Data analysis

Descriptive statistics were used to characterize sociodemographic data in JASP 0.16. The KMO index (Kaiser-Meyer-Olkin) and the Bartlett sphericity test were inspected for the application of factor analysis in the data matrix, also in the JASP 0.16 software (Hair et al., 2006). Exploratory factor analysis was used to test the adequacy of the model in the Brazilian population in relation to the original instrument, having as factorial retention the Kaiser root criterion and parallel analysis implemented in JASP 0.16.

Subsequently, confirmatory factor analysis was made in Mplus 8.8, using factorial extraction and considering the WLSMV algorithm (Weighted Least Square Mean and Variance Adjusted) for the invariance analysis. The invariance models for the measure were compared, and changes in relation to the previous model were considered indicative of violation of invariance (Damásio, 2013). The groups compared in terms of invariance were distinguished by grief, whether or not, due to the COVID-19 pandemic. In the

analysis of invariance, the invariance models were compared for the measure and for the heterogeneity of the sample, being considered indicative of violation of invariance changes in CFI greater than 0.01 in relation to the previous model (Damásio, 2013), when comparing the grief arising or not from the loss of someone due to the COVID-19 pandemic.

The internal accuracy index used to assess the instrument's reliability measures were Cronbach's Alpha and McDonald's Omega, in JASP 0.16, with values above 0.70 being acceptable (Dunn et al., 2014; Ventura-León & Caycho-Rodríguez, 2017). Polychoric correlation was used to verify the relation between the values found in the Traumatic Grief Inventory with the variables: excessive fear, stress and obsessive thinking, evaluated in the Mental Health Self-Perception Questionnaire using the Jamovi 2.3.9 software. The values considered for the magnitude of correlations were: weak (< .30), moderate (.30 to .59), strong (.60 to .99) or perfect (1.0) (Hu & Bentler, 1999; Levin & Fox, 2004).

Results

Internal structure

The first part of the assessment of the instrument's internal structure consisted of verifying whether the instrument met the requirements for carrying out a factor analysis. The value found for the KMO was 0.91 and p = .01 in the Barlett test, indicating that the correlation matrix is factorable (Damásio, 2012; Hair et al., 2006). Exploratory factor analysis indicated factor retention for one factor. The factor structure explored in the study sample presents a plausible model when comparing the version adapted for Brazil with the version found by Boelen and Smid (2017), with good fit index. Table 2 presents the factor loadings and the internal consistency values found.

Table 2

Internal structure obtained in exploratory factor analysis of the Traumatic Grief Inventory

Item	Items (In portuguese)	Factor loadings
1	Senti muita saudade e vontade de ver a pessoa que se foi.	.79
2	Eu me senti confuso (a) sobre meu papel na vida, perdendo parte da minha identidade.	.78
3	Tive dificuldades em aceitar a perda.	.87
4	Eu evitei lugares, objetos ou pensamentos que me lembrassem da pessoa que se foi.	.75
5	Eu achei difícil confiar nos outros.	.75
6	Eu me senti amargurado(a) ou com raiva pela minha perda.	.85
7	Senti dificuldade em seguir em frente com minha vida (por exemplo, encontrar amigos, realizar atividades etc.).	.86
8	Eu me senti estagnado (a) após minha perda.	.94
9	A minha vida ficou sem sentido e vazia desde que a pessoa se foi.	.93
10	Eu fiquei em choque pela perda da pessoa que se foi.	.81
11	Percebi que não conseguia fazer mais nada do que precisava (no meu trabalho e/ou vida particular e/ou vida social) após a perda da pessoa que se foi.	.85
	Cronbach's Alpha = .93 McDonald's Omega = .93	

Considering the results from Table 3, the items presented good factor loadings, all above 0.40 (Putnick & Bornstein, 2016) and that the reliability value for the instrument, both by the McDonald's Omega and by the Cronbach's Alpha, it was considered excellent (Ventura-León & Caycho-Rodríguez, 2017). Then, confirmatory factor analysis was conducted to verify if the Brazilian version had adequate fit index. These results are presented in Table 3.

Table 3

Adjustment indices for the adapted Traumatic Grief Inventory, considering the model proposed by Boelen and Smid (2017)

Model	x^2**/df**	**CFI**	**SRMR**	**TLI**	**RMSEA**
Reference value	< 3	≥ .90	< 0.08	≥ .90	< .05
One-factor structure	3.97	.97	0.06	.96	.12

The adjustment indices were reasonable, obtaining values close to the reference values. The values of x²/df and RMSEA exceeded the reference values, while the others remained desirably at the referenced value. Table 4 presents the results in relation to the analysis of invariance of the instrument for people grieving, as a result or not of the COVID-19 pandemic.

Table 4

Invariance analysis for the Traumatic Grief Inventory, considering grief in terms of losing or not losing a person in the COVID-19 pandemic

Modeling		**χ2/df**	**CFI**	**TLI**	**SRMR**	**RMSEA**
Measurement invariance	Configurable invariance	2.65	.97	.97	0.05	.12
	Metric invariance	2.53	.97	.97	0.05	.12
	Scalar invariance	1.95	.98	.98	0.05	.09

Based on the results in Table 4, we observed that the instrument showed invariance, since the adjustment indices such as CFI and TLI were not greater than 0.01 when compared to the previous model. There was also no significant difference ($p > 0.05$) when comparing the models tested (configurable vs metric; metric vs scalar; scalar vs metric). This indicates that people who lost someone because of COVID-19 pandemic, when compared to people who lost in other situations, understand the instrument in a similar way. Finally, Table 5 shows the correlations found between the Grief Inventory and mental health measures.

Table 5

Correlations between the Traumatic Grief Inventory - Total Score with measures of excessive fear, obsessive thoughts and excessive stress

	Excessive fear	Obsessive thoughts	Excessive stress
Traumatic Grief Inventory (ILT – BR)	.35**	.48**	.27**

** $p < 0.01$

Considering the results of the Table 5, it is observed that the more traumatic the grief the person experienced, the greater the presence of excessive fear, obsessive thoughts and increased stress. All correlations were statistically significant and of moderate magnitude.

Discussion

The aim of the present study was to verify the validity evidence of the shortened version adapted to Brazilian Portuguese of the Traumatic Grief Inventory (Boelen & Smid, 2017). In this sense, the first step consisted of translating and adapting the instrument to Brazil. From the verification of the final version of the instrument, which went through both the evaluation of expert judges and the target population, it can be seen that the instrument presented evidence of validity based on the content (AERA et al., 2014), as all were able to clearly understand the items, as well as how they are applied, in addition to being considered equivalent to the original version by the specialists. These data indicate that there is a theoretical coherence between the version built in the States and the Brazilian version, which makes the instrument can be used in Brazil and, in the future, there is also the possibility of intercultural studies, since the versions are equivalent.

In the next step, the verification of the psychometric properties was evaluated through a confirmatory factor analysis, verifying the relationship with external variables and TGI-SR reliability. Based on these results, it can be said that the instrument presents good evidence of internal structure, because we found good fit index in the confirmatory factor analysis, in addition to factor loadings above 0.63. The factor loadings are very close to those found by Boelen and Smid (2017), which were all above .59 and better than those found in the follow-up study by Boelen et al. (2018), in which the factor loadings were above .45. The factor loading of each item indicates the percentage of variance that is explained by the factor, therefore, the higher it is, the better indicator of the dimension of the construct is the item. In other words, the factor loadings found in this study indicate that the explained variance for each item is significant, which justifies the permanence of all items in the instrument (Putnick & Bornstein, 2016). Regarding the reliability value found, it was considered excellent ($\omega = .93$ and $\alpha = .93$ (Ventura-León & Caycho-Rodríguez, 2017), being identical to the study by Boelen and Smid (2017) and by Boelen et al. (2018) and close to that of Baş et al. (2020), which was .94. This data indicates that the instrument is stable, which is essential for it to be used to measure the presence of traumatic grief in the Brazilian population.

Furthermore, all versions of the instrument found, including the one adapted in this study, seem to be representing what they propose within their cultures, in this case, persistent traumatic grief, and are equivalent. The existence of measures that evaluate the same construct in a similar way allows, in the future, comparisons between different cultures (Borsa & Seize, 2017; Van de Vijver, 2016). The fact that it is possible to adequately assess the presence of traumatic grief and, in the future, standardize this measure, can serve to propose interventions for people who are experiencing grief in a pathological way, since there are studies that indicate that this has a negative effect on the mental health of these people (Boelen et al., 2018). These interventions may help in the treatment and identification of these correlates.

About evidence of validity in relation to external variables, significant correlations were found between the ILT-BR and the presence of excessive fear, obsessive thoughts and increased stress. These data corroborate previous studies by Boelen and Smid (2017), Boelen et al. (2018) and de Baş et al. (2020), showing a positive correlation between the

presence of persistent traumatic grief and psychopathology measures, in addition to confirming the initial hypotheses, indicating the presence of this type of validity evidence. This can be explained because people who experience traumatic grief can start to feel afraid of losing other people or even of dying, and with this, frequent thoughts related to this theme or even other ways of "dying" can arise, which can lead to a state of frequent stress. However, it would be interesting to propose a theoretical model to verify these correlations and the directions between them. It can also be said, from these data, that people with greater difficulty to overcome a grieving process and are more susceptible to the presence of comorbidities that can harm their mental health, in general, such as a greater probability of presenting depression and anxiety. In view of this, it is necessary to also evaluate these comorbidities, in interventions, so a comprehensive care can be provided to the grieving person (Cortez et al., 2020; Dahdah et al., 2019; Maciejewski et al., 2016).

Finally, the last analysis proposed for the ILT-BR was to verify if the instrument had measurement invariance, considering people who lost or not someone during the COVID-19 pandemic. According to the results found, there was no type of invariance, which suggests that the measure is understood in a similar way throughout the sample, regardless of possible consequences resulting from the pandemic. This is a good result, as assessments of the presence of traumatic grief can be performed even in this population. Considering that invariance measures group differences that are often due to social issues, being able to control this and verify that there is none in the sample indicates a fairer instrument of measurement. However, as a year has not passed since the loss of these close people because of the pandemic, this may be a bias. It is suggested that, in the future, new invariance studies comparing different types of losses be carried out to verify if the presence of invariance remains.

Conclusion

The objective of the present study was to investigate the validity evidence of the ILT-BR, and the results found support the hypothesis that the instrument presents good evidence of validity for use in Brazil. However, even in the face of positive results, it is noteworthy that the data must be considered with reservations, since the collection was collected only online and that the participants who were grieving because of the COVID-19 pandemic, did not they could still be considered with persistent traumatic grief. In view of this, it is suggested that further studies be performed, so that the instrument could have more evidence of validity. Finally, the positive point of the ITL-BR is that it can identify the presence of persistent traumatic grief, which can be an important tool both for the development of research in the area, as well as for guiding interventions with this population, regardless of the type of a situation that caused the death of a close person (Baş et al., 2020; Maciejewski et al., 2016).

Regarding the limitations of this study, we highlight the non-probabilistic convenience sampling and the sociodemographic characteristics of the sample, one of which was the participants' education, because both in the pilot study and in the next stage of application to the general population, most of the participants had at least high school education, that is, at least 11 years of schooling, in addition to being white and female. It would be interesting to test the items on people with lower levels of schooling or even without schooling to verify their understanding and the possibility of applying the instruments by third parties (in the case of people with no schooling), as well as expanding the sample to people who classify themselves as other identities in relation to color and sex. Another limitation was the fact that the collection procedure was only online and the

search for evidence of content validity considered only a qualitative assessment. In future studies, face-to-face collection and even a comparison between the two types of collection are also suggested. Furthermore, in future studies it would be important to analyze the relationship with other variables that are also related, such as depression, post-traumatic stress and anxiety (APA, 2013; Maciejewski et al., 2016), followed by the proposition of norms for the ILT- BR

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