Translation and validation of core bereavement items into Urdu language on a sample of bereaved parents and spouses in Pakistan: A pilot study
Syed Aziz Uddin Agha¹, Mohammad Anis-Ul-Haque²

Abstract
Core Bereavement Items Scale was translated into Urdu language and validated in Pakistani population through forward-backward procedure. It is a 17-item scale with three subscales, namely Images and Thoughts, Acute Separation, and Grief.

A cross-sectional study was commenced on June 10, 2016, and completed by July 2017 as part of a pilot study of PhD research at National Institute of Psychology, Quaid-i-Azam University, Islamabad. Two hundred and sixty (260) participants were selected through a combination of convenience and snowball techniques. Results showed good alpha reliability and item-total correlation ranged from 0.62 to 0.77. Confirmatory factor analysis showed good fit of the model on the data. The findings supported the three-factor solution for the translated version of the CBI. The findings also indicated that females and participants living in nuclear family system report more severe bereavement.

CBI Urdu version can be used as a valid and reliable measure for the assessment of bereavement intensity in Urdu speaking population anywhere in the world.

Keywords: Translation; Validation; Bereavement; Parents; Spouses.

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Introduction
Loss of a loved one due to death is a major and emotionally painful event.¹ Literature is abundant with reports of maladaptive and negative outcomes in the aftermath of bereavement and other adversities.²⁻⁴ The interest of mental health professionals in studying bereavement is important because of the implications of this phenomenon for mental health. Mostly, the measurement tools of bereavement experience have been developed in Western cultures, and scales are primarily culture bound.⁵ The present study aimed to translate CBI into Urdu language and validate it in population of Balochistan (The native area of the first author).

Methods and Results
The present study was a cross-sectional study. The translation and validation process was a part of PhD research pilot study which commenced on June 10, 2016, and was completed by July 2017, at the National Institute of Psychology, Quaid-i-Azam University, Islamabad.

Prior approval of the author of the original scale was obtained through email. Four M.Phil. and PhD scholars at the Quaid-i-Azam University, Islamabad translated the Core Bereavement Items Scale from English into Urdu independently. These translators had proficiency in reading, writing and speaking both the languages.

The four Urdu translations were synthesised in a committee of experts. Six bilingual individuals independently translated back Urdu version of CBI into English. These individuals were M.Phil. and PhD scholars at the Quaid-i-Azam University in different disciplines and all of them were blind to the original version of the scale.

The entire translation process was scrutinised by a four member committee of PhD scholars of National Institute of Psychology. Through this final step of the committee scrutiny, the pre-final Urdu version of the scale was prepared.

The translated scale was administered to 20 bereaved parents and spouses with the objective to evaluate the face and operational validity of the instructions and items of the scale. The scale was now approved for statistical examination. The study participants were selected through a mixed approach of convenience and snowball sampling technique. Two hundred and sixty (260) bereaved individuals (parents = 135 (51.9 %), spouses = 125 (48.1 %)) completed the translated version of Core Bereavement Items Scale. Mean age of the participants was 45.20±14.57 years. Informed consent was obtained from the participants of the study on an informed consent form.

The data were collected in Quetta city and some other districts of Balochistan, Pakistan. Parents and spouses were included in the study only if the bereavement period had

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not exceeded 24 months. Each participant completed the scale independently. The participants were accessed for data purpose either at their residence or workplace.

Core Bereavement Items scale was originally developed by Burnet et al.\(^5\) It has 17 items and three subscales. The scale has no reverse item. It has five point Likert response options ranging from 0 (never) to 3 (continuously). Possible scores range is 0-51. Alpha coefficient was 0.91. Subscale of Images and Thoughts consists of items 1 to 7 with possible score range of 0-21, and its alpha coefficient was 0.74; Subscale of Acute Separation consists of items 8 to 12 with possible score range of 0-15, and its alpha coefficient was 0.77, and subscale of Grief consists of items 13 to 17 with possible score range of 0-15, and its alpha coefficient was 0.86. Higher score on CBI indicates greater intensity of bereavement.

Cronbach’s alpha method was used to examine reliability of translated version of Core Bereavement Items scale and its three subscales. Results showed that the full scale and its subscales have good reliability. Full scale 0.94; Images and Thoughts subscale 0.88; Acute Separation subscale 0.82; and Grief subscale 0.86. Split-half method was also used to examine the reliability of the full scale. Items 1 to 9 were entered in the first half and item 10 to 17 were entered in the second half. This analysis showed that both the halves have good reliability (0.80 and 0.81 respectively). Results obtained from t-test showed that female and participants living in nuclear family system reported more intensity of bereavement.

Table-1: Mean Standard Deviation (SD), Item-total correlation and corrected item correlation for overall Core Bereavement Items scale and subscales-Urdu. Values in parentheses are for the subscales (n = 260).

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean±SD</th>
<th>r</th>
<th>Corrected r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.12±0.89</td>
<td>0.74**(0.81**)</td>
<td>0.71(0.73)</td>
</tr>
<tr>
<td>2</td>
<td>2.03±0.90</td>
<td>0.77**(0.82**)</td>
<td>0.74(0.75)</td>
</tr>
<tr>
<td>3</td>
<td>2.11±0.90</td>
<td>0.74**(0.80**)</td>
<td>0.70(0.72)</td>
</tr>
<tr>
<td>4</td>
<td>2.08±0.92</td>
<td>0.73**(0.80**)</td>
<td>0.69(0.72)</td>
</tr>
<tr>
<td>5</td>
<td>2.04±0.90</td>
<td>0.76**(0.82**)</td>
<td>0.72(0.74)</td>
</tr>
<tr>
<td>6</td>
<td>1.84±0.95</td>
<td>0.68**(0.73**)</td>
<td>0.63(0.62)</td>
</tr>
<tr>
<td>7</td>
<td>1.73±1.05</td>
<td>0.62**(0.64**)</td>
<td>0.56(0.50)</td>
</tr>
<tr>
<td>8</td>
<td>2.27±0.89</td>
<td>0.74**(0.75**)</td>
<td>0.70(0.61)</td>
</tr>
<tr>
<td>9</td>
<td>2.12±0.89</td>
<td>0.76**(0.80**)</td>
<td>0.72(0.68)</td>
</tr>
<tr>
<td>10</td>
<td>1.88±0.96</td>
<td>0.71**(0.77**)</td>
<td>0.67(0.62)</td>
</tr>
<tr>
<td>11</td>
<td>1.52±1.02</td>
<td>0.62**(0.71**)</td>
<td>0.56(0.52)</td>
</tr>
<tr>
<td>12</td>
<td>1.74±1.04</td>
<td>0.68**(0.78**)</td>
<td>0.62(0.61)</td>
</tr>
<tr>
<td>13</td>
<td>1.89±0.92</td>
<td>0.72**(0.75**)</td>
<td>0.68(0.61)</td>
</tr>
<tr>
<td>14</td>
<td>1.88±0.99</td>
<td>0.75**(0.81**)</td>
<td>0.70(0.68)</td>
</tr>
<tr>
<td>15</td>
<td>1.77±0.96</td>
<td>0.75**(0.83**)</td>
<td>0.71(0.72)</td>
</tr>
<tr>
<td>16</td>
<td>1.92±0.87</td>
<td>0.74**(0.80**)</td>
<td>0.71(0.69)</td>
</tr>
<tr>
<td>17</td>
<td>1.65±0.99</td>
<td>0.73**(0.80**)</td>
<td>0.69(0.67)</td>
</tr>
</tbody>
</table>

Note. Item No 1 to 7 = subscale Images and thoughts; Item No 8 to 12 = subscale Acute separation; Item 13 to 17 = subscale Grief. **p<0.0.

Table-2: Confirmatory factor analysis (CFA) values for Core Bereavement Items Scale-Urdu (n =260).

<table>
<thead>
<tr>
<th>Model</th>
<th>x2(df)</th>
<th>GFI</th>
<th>IFI</th>
<th>CFI</th>
<th>SRMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>252.02</td>
<td>0.89</td>
<td>0.94</td>
<td>0.94</td>
<td>0.04</td>
<td>0.06</td>
</tr>
<tr>
<td>Model 2</td>
<td>232.25</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
<td>0.04</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Note. SRMR = standardised root mean square residual; IFI = incremental fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation.

Table-1 shows the Mean and SD values for each item and it shows that there is consistency of each individual item with the total score of the scale. Corrected item analysis for each item in the Table shows the level of consistency between individual item and the scale total score if a given item is deleted. Results in the Table show significant positive correlation between all items of the scale and the total score of the scale. The significance level is at p<0.01. There is also significant positive relationship between all the items of three subscales with the total score of the respective subscale. Corrected item analysis shows acceptable coefficient values for each item if a given item is deleted.

Table 2 shows the results acquired through the steps of model specification, model identification, model estimation, model assessment, and model re-specification of CFA. They show good fit for translated version of Core Bereavement Items scale and all the important indices are in acceptable range.

**Discussion**

To convert a questionnaire into another language is a complex process and is a major step in cross-cultural research.\(^6\) In the present study, during the process of translation, bilingual translators were involved and all of them were well aware of the indigenous terminologies and words used for bereavement and its related experiences and feeling. The expert committee ensured that the meanings of the original items were sufficiently captured in Urdu.

Internal consistency of a scale relates to its homogeneity and mostly Cronbach’s alpha is used to examine the coefficient of internal consistency. Reliability of the translated CBI was evaluated by considering the following: (a) Cronbach’s alpha coefficient; (b) split-half method; (c) item-total correlation coefficient; (d) and the alpha estimate when an item was dropped from the scale. These values of reliability for the translated CBI are well above the acceptable range and closer to the values of the original version. Following are the coefficient alpha values of the Urdu version of the scale along with the values of the original version in parentheses. Full scale 0.94 (0.91); Images and Thoughts subscale .88(.74); Acute Separation subscale 0.82(0.77); and Grief subscale 0.86(0.86).
Face validity of the translated version of the scale was ensured through pretesting, and content validity was ensured qualitatively through the experts’ committee after the forward/backward translations were completed.

Assessment of an instrument whether it measures the given construct is content validity. (Fitzner, 2007, cited by Zamanian & Kharameh).7 Because of the translatability, short sentences of the scale, and appropriate process of translation and expert committee review, the structural, conceptual and semantic equivalence of the translated CBI with its original version was ensured. Results of statistical assessment of its psychometric properties validated the translated CBI as a valid and reliable scale.

Translation, cross-cultural adaptation, and psychometric evaluation of CBI were performed in this study. The results suggest that the translated version of Core Bereavement Items (CBI-Urdu) is an easy to use, reliable and valid scale for measuring intensity of bereavement experience and it can be used anywhere with Urdu speaking population.

Conclusion

For medical practitioners, students, and academic researchers bereavement research is a potential area to work in. The present study has provided indigenously validated tool of measurement in the form of Urdu version of CBI for such aspirant researchers.

Disclaimer:

1. The abstract of the manuscript was presented as poster (ICPP 2018-406) at 7th International Conference “Positive Psychology: Developing a Flourishing Community” on November 29 – 30, 2018 organised by National Institute of psychology, at Islamabad, Pakistan.

2. Some part of the data is used for the article based on the doctoral research. This article is in press for publication in Pakistan Journal of Psychological Research. 2020, 35 (1), 671-692. https://doi.org/10.33824/PJPR.2020.35.1.00.

3. This manuscript was submitted to Asian Journal of Psychiatry. It was refused for publication (decision on Feb 08, 2020) after the external review process was completed with the decision that this manuscript was somehow not in the scope of Asian Journal of Psychiatry. However, they suggested few other relevant international journals for publication of this manuscript.

4. Recently this manuscript was being submitted to journal of Pakistan Psychiatric Society. However, I quit completing the submission process to the journal because of some ambiguity about the acceptance of my thesis based manuscript publication in Journal of Pakistan Psychiatric Society as par the criteria of Higher Education Commission of Pakistan for doctoral thesis submission.

Conflict of interest: None

Funding disclosure: None

References


