Abstract

Objectives: The aim of the present study was to investigate the construct validity of the Assessment of Countertransference Scale (ACS) in the context of the trauma care, through the identification of the underlying latent constructs of the measured items and their homogeneity. Methods: ACS assesses 23 feelings of CT in three factors: closeness, rejection and indifference. ACS was applied to 50 residents in psychiatry after the first appointment with 131 victims of trauma consecutively selected during 4 years. ACS was analyzed by exploratory (EFA) and confirmatory (CFA) factor analysis, internal consistence and convergent-discriminant validity. Results: In spite of the fact that closeness items obtained the highest scores, the EFA showed that the factor rejection (24% of variance, α = 0.88) presented a more consistent intercorrelation of the items, followed by closeness (15% of variance, α = 0.82) and, a distinct factor, sadness (9% of variance, α = 0.72). Thus, a modified version was proposed. In the comparison between the original and the proposed version, CFA detected better goodness-of-fit indexes for the proposed version (GFI = 0.797, TLI = 0.867, CFI = 0.885 vs. GFI = 0.824, TLI = 0.904, CFI = 0.918). Conclusions: ACS is a promising instrument for assessing CT feelings, making it valid to access during the care of trauma victims.
Trauma e contratransferência: desenvolvimento e validação da Assessment of Countertransference Scale (ACS)

Resumo
Objetivos: O objetivo do presente estudo foi investigar a validade de construto da Assessment of Countertransference Scale (ACS) no atendimento a vítimas de trauma, pela identificação de construtos latentes subjacentes dos itens medidos e sua homogeneidade. Métodos: A ACS avaliou 23 sentimentos de CT em três fatores: proximidade, rejeição e indiferença. A ACS foi aplicada a 50 residentes de psiquiatria após a primeira consulta com 131 vítimas de trauma selecionadas consecutivamente durante 4 anos. A ACS foi analisada por análise fatorial exploratória (AFE) e confirmatória (AFC), consistência interna e validade convergente-discriminante. Resultados: Apesar do fato dos itens de proximidade terem obtido os escores mais altos, a AFE demonstrou que o fator de rejeição (24% da variância, \( \alpha = 0.88 \)) apresentou uma intercorrelação mais consistente dos itens, seguido pela proximidade (15% da variância, \( \alpha = 0.82 \)) e um fator distinto, tristeza (9% da variância, \( \alpha = 0.72 \)). Foi proposta, portanto, uma versão modificada. Na comparação entre a versão original e a proposta, a AFC detectou índices de adequação melhores para a versão proposta (GFI = 0.797, TLI = 0.867, CFI = 0.885 vs. GFI = 0.824, TLI = 0.904, CFI = 0.918). Conclusões: A ACS é um instrumento promissor para a avaliação de sentimentos de CT, tornando seu uso válido para a avaliação durante o cuidado de vítimas de trauma.

Introduction

Approximately half of the population goes through a potential traumatic event during their lifetime, increasing the demand for psychiatric treatment. Caring for trauma victims is complex, triggering intensive countertransference (CT) feelings which are frequently ambivalent and painful and may disturb the therapeutic alliance. Thus, proper training of therapists to care for this population is essential.

Many efforts have been made to conceptualize CT around one basic definition, but the researchers diverge about it. Currently, in the context of psychoanalytical theory, the concept of CT has begun to converge around the definition that it is determined by the therapist’s feelings directed by a patient’s particular characteristics, such as the type of transference, relation with their internal objects, personality aspects, attachment pattern and others. CT is also modulated by therapist personality characteristics. We can say that CT is a phenomenon that cannot be separated from transference, since both are created jointly in the dynamic field of the dyad patient-therapist. However, the therapist’s feelings that are not correlated with the transference are considered his/her transferences to the patient. Other authors consider CT a complex reaction of the therapist imposed by the patient, including therapists’ actions at work, called CT behavior. Furthermore, recent research still has considered CT as a hindrance to treatment, in accordance with the Freudian viewpoint, the first to describe the phenomenon one hundred years ago. In psychoanalytical theory, CT behavior is considered a projective counter-identification. Moreover, in this context, CT is considered an important tool for therapists to monitor their internal world to improve interpretations (to aid communication) and to establish the therapeutic alliance, especially when feelings raised by the real or imagined situation experienced by patients are intense, never an obstacle.

There are different ways to study psychological phenomena. The advantage of using standard instruments to assess CT is to allow replication and to compare studies with reliability. With that in mind, some studies correlate particular aspects of CT with types of diagnoses, personality disorders, therapeutic alliances and attachment patterns, and characteristics of patients and therapists. However, there are few valid instruments to assess CT, restricting the development of research that explains this process. Moreover, the quantification of CT may contribute to expand the research in dynamic psychotherapy and the integration of psychoanalytic concepts in clinical psychiatric practice.

The Assessment of Countertransference Scale (ACS) assesses CT through the frequency with which 23 feelings are identified by therapists. Despite the face validity of ACS and its great applicability in clinical and research contexts, its construct validity has not yet been assessed. Therefore, the aim of this study was to provide the initial steps towards construct validation of the ACS in the context of care for psychological trauma victims.

Method

Participants and Procedures

The therapists were Psychiatry residents who are temporarily assisting patients (six months period) at the Center for Study and Treatment of Traumatic Stress, Hospital das Clínicas de Porto Alegre, Brazil. All residents (n = 50) were invited to participate after the first consultation of a new patient. The mean age of the residents was 27 years (SD = 3), 67.9% were women, and 50.4% had previous experience caring for victims of trauma. The patient sample was 131 patients (48.5% victims of rape, 35.1% urban violence, 5.3% multiple trauma, and 13.7% other types of trauma), consecutively included in the study over 4 years. Patients were selected after screening,
which assessed clinical variables and diagnoses according to DSM-IV-TR criteria. Patients’ mean age was 36 years (SD = 13), 83.2% were women, 48.9% lived with a partner, and 55.7% had finished elementary school. Time elapsing between the current appointment and the trauma event had a median of 11 months [1; 146]. The patients’ diagnosis in axis I were: 82 with post traumatic stress disorder; 23 with acute stress disorder; 20 with mood disorder; 1 with substance dependence disorder; 1 with somatization disorder; and 4 without diagnosis. The patients’ diagnoses in axis II were: 1 with cluster A personality disorder; 17 with cluster B personality disorder; 2 with mental retardation; and 111 without diagnosis. The presence of comorbidities in axis I and/or II were verified in 40 patients. We have excluded patients with severe suicidal ideation, psychotic symptoms, and/or referral for psychiatric hospitalization, considering these situations potentially not specific for CT with trauma victims.

All participants gave their written informed consent before entering the study, which was approved by the local ethics committee.

### Measures
ACS was developed after a qualitative study of CT in six cases treated with brief dynamic psychotherapy, which listed the 26 feelings found divided into two groups: pity and grief. This list was made through analysis of the therapist’s CT report and retrospective analysis of sessions audiotaped during treatment by a group of experts. From this list, clinical and theoretical revision in CT was performed and each feeling was standardized and conceptualized, and those that characterized it better were selected according to 3 dimensions: closeness (10 items), distance (10 items) and indifference (3 items). This version (Chart 1) was assessed by experienced analysts and psychotherapists with a psychoanalytical background, which considered that the items could assess conscious countertransference feelings. ACS is a self-applied scale composed of 23 items scored in a Likert-type scale (0 = absence to 3 = very) for three moments of the session (start, midpoint and end) to capture how feelings varied during care, producing a mean score between them. This version of the scale was used in previous research without the next steps of the construct validation process.

### Chart 1 Assessment of Countertransference Scale (ACS)

<table>
<thead>
<tr>
<th>Original version</th>
<th>Version for therapists of trauma victims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
</tr>
<tr>
<td>Curiosity</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Interest</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Sympathy</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Solidarity</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Affection</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Wish to help</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Happiness</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Sadness</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Pity</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Attraction</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Closeness Score</td>
<td></td>
</tr>
<tr>
<td>Discomfort</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Mistrust</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Boredom</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Rejection</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Despair</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Reproaching</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Accusation</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Irritation</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Fear</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Hostility</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Distance Score</td>
<td></td>
</tr>
<tr>
<td>Disinterest</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Distance</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
<tr>
<td>Immobility</td>
<td>0 1 2 3 0 1 2 3 0 1 2 3</td>
</tr>
</tbody>
</table>

Instructions: Evaluate whether, during the interview, you realized in yourself some of the feelings described below in relation to the respondent. Make a circle around the number that best expresses what you felt.

0 = Nothing; 1 = Little; 2 = Moderately; 3 = Very
Data Analysis

The scoring of items was analyzed by a frequency table and histogram. The items were compared across the 3 moments by ranks of Friedman test. EFA was conducted by the method of extracting factors: Principal Axis Factoring. Extraction factors for Varimax rotation were determined by scree test and parallel analysis, for each moment and subsequent factorial design qualitative comparison between them.22 Using the mean score between the 3 moments of each item, a final EFA (with the same criteria) was conducted to create a unique factorial model. We consider the largest factor loading (minimum > 0.3) and their positions in the initials EFA determine which factor the item belongs to. Moreover, EFA were conducted according to the type of trauma and the sex of the therapists and patients, because the relation between caregiver and patient could be influenced by these features.15,23 An examination of the feasibility of performing the EFA was carried out using the Kaiser-Meyer-Olkin (KMO) test. Intraclass concordance coefficient (ICC) was used to control data independence (ICC < 0.7) because the therapists answered the ACS more than once (mean = 2.6). Internal consistency for each identified factor in the final EFA was detected by Cronbach’s α coefficient, and the relation between them was determined by Pearson and Spearman’s rho correlation coefficient. CFA was used to compare the original version of ACS and the proposed version obtained in this study, using the following goodness-of-fit criteria: goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), Tucker-Lewis index (TLI), and comparative fit index (CFI). All tests were two-tailed and the level of significance adopted was α = 0.05. Statistical analysis was performed using SPPS statistical software 16.0 and AMOS 6.0 (SPSS, Chicago, IL, USA).

Results

The item “wish to help” achieved a greater mean (2.51, SD = 0.57) and “hostility” a lower mean (0.19, SD = 0.42). Eight out of 23 items showed significant differences in scores at the three moments of the ACS (Table 1). In the first EFA, we found 3, 2 and 3 factors respectively for start, midpoint, and end. The item “distance” showed similar bipolar factor loadings in the two first factors for start and end. The items “attraction” and “fear” showed factor loadings < 0.3, (except fear, midpoint load = 0.312), Nevertheless we decided to keep them in the model for further tests. The item “happiness”, also with low factor loading, was withdrawn from the analysis, since it appeared to be an irrelevant countertransferringal feeling in this context.

Aggregating the scores across the three moments of the visit, the final factorial solution showed 3 interpretable factors (Table 1). First, rejection (24% of variance) was composed of 9 items: irritation, rejection, hostility, disinterest, mistrust, accusation, reproach, boredom and distance. Second, closeness (15% of variance) was composed of 7 items: interest, affection, curiosity, solidarity, wish to help, sympathy and attraction. Third, sadness (9% of variance) was the most different from the original version because it captured items from all factors: sadness, pity, despair, immobility, discomfort and fear. The factor structure of the ACS was similar when we consider the type of trauma and the sex of therapists and patients. The KMO measure of sampling adequacy yielded a high value of 0.868 and supports the possibility of finding underlying factors. Internal consistencies for factors were: rejection α = 0.88, closeness α = 0.82, and sadness α = 0.72.

The convergent-discriminant validity between factors showed correlation between rejection and closeness r = -0.61 (p < 0.001), and between sadness and rejection r = 0.36 (p = 0.001). However, closeness and sadness did not present significant correlation (r = -0.05, p = 0.59).

The CFA has detected better goodness-of-fit indexes for all observed criteria in the comparison between the original version of ACS (GFI = 0.797, AGFI = 0.744, TLI = 0.867, CFI = 0.885) and the proposed version (GFI = 0.824, AGFI = 0.776, TLI = 0.904, CFI = 0.918).

Discussion

The ACS has been developed to assess CT in dynamic psychotherapy. The ACS appears to be a reliable psychometric tool to assess CT in the initial contact with trauma victims, with the convenience of being an easily comprehensible instrument.
Betan et al.\textsuperscript{15} have suggested a CT specific for trauma,\textsuperscript{15} but, up to the present, no studies have been able to demonstrate this hypothesis. In our analyses, the factor rejection was the most consistent and the CT feelings varied during the appointment: they were more grouped and less correlated in the beginning, and during the session there was a polarization between rejection and closeness, and they ended up being more correlated with each other. This complex situation, probably of non-linear correlations, seems to indicate that over the session there was a CT formulation. However, in the sadness factor, we found a difference in the ACS compared to the original version and to other instruments. We postulated the creation of this factor because it was constant in EFA in the 3 moments of the ACS and it was described in the study prior to its creation.\textsuperscript{20} Even so, a further study of the existence of this factor is necessary because items were not constantly arranged during the 3 moments of the scale: 4 items had significantly different scores and 2 of these items with load > 0.3 in the factor rejection.

Some methodological aspects of this study need to be addressed. First, the sample size is moderate and composed mainly of women. Second, the patients had various types of trauma, and sexual abuse was present in half of the sample. However, the factor structure of the ACS did not present alteration when these variables were considered. Third, all therapists were psychiatrists beginning their training, enhancing internal validity, but restricting the extrapolation to other areas. Nevertheless, the present study provides preliminary evidence that ACS is a psychometrically valid measure to assess conscious CT feelings in a traumatized adult population. The next step is to replicate this study in other samples, in larger samples of both patients and therapists, and to compare the ACS with other instruments.

Countertransference responses may show coherent and predictable patterns of diagnostic understanding, especially with regards to the treatment of trauma victims, since CT with these patients is intense and painful.\textsuperscript{15} Thus, the present study may contribute to therapists’ self-knowledge, and a consequent improvement in care and development of the integration of psychoanalytical concepts in psychiatric practice.

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\begin{itemize}
  \item * Modest
  \item ** Significant
  \item *** Significant
\end{itemize}

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References


