Alienation Appraisals Distinguish Adults Diagnosed With DID From PTSD

Anne P. DePrince
University of Denver

Rafaële J. C. Huntjens
University of Groningen

Martin J. Dorahy
University of Canterbury

Studies are beginning to show the importance of appraisals to different types and severities of psychiatric disorders. Yet, little work in this area has assessed whether trauma-related appraisals can differentiate complex trauma-related disorders, such as posttraumatic stress disorder (PTSD) and dissociative identity disorder (DID). The current study evaluated whether any of 6 trauma-related appraisals distinguished adults diagnosed with DID from those diagnosed with PTSD. To accomplish this, we first examined the basic psychometric properties of a Dutch-translated short-form of the Trauma Appraisals Questionnaire (TAQ) in healthy control ($n = 57$), PTSD ($n = 27$) and DID ($n = 12$) samples. The short-form Dutch translation of the TAQ showed good internal reliability and criterion-related validity for all 6 subscales (betrayal, self-blame, fear, alienation, shame, anger). Of the 6 subscales, the alienation appraisal subscale specifically differentiated DID from PTSD, with the former group reporting more alienation. Abuse-related appraisals that emphasize disconnection from self and others may contribute to reported problems of memory and identity common in DID. The current findings suggest that addressing experiences of alienation may be particularly important in treatment for clients diagnosed with DID.

Keywords: alienation, DID, Dutch TAQ, posttrauma appraisals, PTSD

Individuals exposed to interpersonal trauma show an array of psychological responses (Lanius, Vermetten, & Pain, 2010), with appraisals of trauma posited to influence the form these responses take (DePrince, Chu, & Pineda, 2011; DePrince, Zurbriggen, Chu, & Smart, 2010; Ehlers & Clark, 2000; Ehring, Ehlers, & Glückman, 2008). For example, studies focused on different appraisal types in relation to symptoms have identified links between shame appraisals and posttraumatic stress disorder (PTSD) as well as self-blame and depression (Andrews, Brewin, Rose, & Kirk, 2000; Kaysen, Scher, Mastnak, & Resick, 2005). Returning to the roots of earlier narrative research (e.g., Roth & Newman, 1991), DePrince et al. (2011) observed that narrative methods often revealed themes of alienation (i.e., disconnection from the self and others) and trust/betrayal (i.e., the degree to which the trauma represented a betrayal by another person) in how trauma survivors talk about trauma-related cognitions and emotions. Alienation and betrayal emerged in narrative interviews collected from men and women exposed to diverse traumas (e.g., sexual, physical, child abuse, combat; DePrince et al., 2010). In contrast, self-report studies, where researchers define what themes are included on the scales they administer, generally did not include measures of alienation or betrayal. This led to the development of a self-report measure of posttrauma themes including previously recognized trauma-related appraisals (i.e., fear, shame, self-blame, and anger) as well as additional scales on alienation and betrayal; the Trauma Appraisal Questionnaire (TAQ; DePrince et al., 2011). Early work with the TAQ examined links between the six subscales and different forms of common post-trauma symptoms. Across a range of samples and forms of trauma exposure (e.g., domestic violence, sexual trauma), participants’ posttrauma appraisals accounted for variance in trauma-related distress above and beyond characteristics of the trauma itself. Alienation was the only subscale that significantly related to different forms of distress (dissociation, depression, and PTSD symptom severity; DePrince et al., 2011).

Though PTSD and dissociative symptoms are common correlates of trauma exposure, researchers have yet to ask whether appraisals can distinguish individuals who meet criteria for PTSD from Dissociative Identity Disorder (DID). The degree to which alienation or other appraisals distinguish people diagnosed with PTSD from DID can inform theory development and point to areas of emphasis in cognitive interventions (Ehlers & Clark, 2000). To test whether alienation, betrayal, or other appraisals distinguished PTSD from DID, we translated the TAQ, a measure of posttrauma appraisals, into Dutch and tested both criterion-related validity and internal consistency. Next, we tested whether appraisals (shame, self-blame, fear, betrayal, alienation, anger) distinguished participants who met criteria for PTSD or DID. Because initial work suggests alienation has ties to complex responses to trauma, we...
hypothesized that alienation may be uniquely linked with the profound disruptions in identity and interpersonal relatedness that comprise DID relative to other trauma-related diagnostic outcomes, such as PTSD. Further, links between betrayal and dissociation found in two samples (DePrince et al., 2011) led us to predict that betrayal would be linked with DID relative to PTSD diagnoses.

Method

Participants

Female adults, recruited as part of a larger study (Huntjens, Wessel, Hermans, & Van Minnen, 2014; Huntjens, Verschuere, & McNally, 2012), constituted four groups: nonclinical controls, DID participants, PTSD, and DID. The healthy control participants included 31 community volunteers (Age M = 42.00, SD = 12.37) who responded to newspaper advertisements. Their average education level was 5.94 (SD = 0.77) on a scale from 1 (low) to 7 (high) (Verhage, 1964). The DID simulator group comprised 26 female amateur actors (Age M = 42.50, SD = 14.02; Education M = 5.69, SD = 1.16) recruited to mimic DID for specific tasks in the larger study. For the measures described here, the actors were not instructed to mimic DID; therefore, they represent another nonclinical control group. Potential control participants (i.e., healthy control group and simulators) were excluded if they reported any relevant memory, visual, or attention problems; had a history of sexual and/or physical abuse; or screened positive for current psychiatric disorders using the Mini-International Neuropsychiatric Interview (M.I.N.I.; Sheehan et al., 1998).

The PTSD and DID samples, recruited by clinician referral from treatment settings (Netherlands, Belgium), all reported histories of severe interpersonal trauma (physical and/or sexual). The PTSD sample included 27 women (Age M = 39.74 years, SD = 12.89; Education M = 5.04, SD = 0.90). Clinician PTSD diagnosis was verified with the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995). No PTSD patients met criteria for DID, assessed with the Dutch version of the Structured Clinical Interview for DSM–IV Dissociative Disorders (SCID-D; Steinberg, 1994). The DID sample included 12 women (Age M = 42.00 years, SD = 11.79; Education M = 5.25, SD = 1.48). Clinician diagnosis of DID was verified with the SCID-D.

Materials

The Traumatic Experiences Checklist (TEC; Nijenhuis, Van der Hart, & Kruger, 2002), a self-report measure of emotional trauma, physical abuse, and sexual trauma with good validity/reliability, was used to index trauma.

The original TAQ is a 54-item self-report scale assessing posttraumatic appraisals via six scales: betrayal, self-blame, fear, alienation, anger, and shame. Given the potential participant burden attributable to size of the assessment battery, the 5 items that loaded most strongly onto each of the six TAQ scales in the original development of the measure (DePrince et al., 2010) were translated and used. This strategy also allowed the exploration of a short version of the TAQ. This seemed especially important because the TAQ is routinely given with a battery of other measures, and a short form that adequately captures the measured variables reduces the size of the battery (and thereby the possibility of participant fatigue that may increase inaccurate responding) or allows other variables/questionnaires to be added to the battery in the space created by a shorter version of the TAQ. For the current study, native Dutch speakers in a university setting translated/back-translated the measure. For each item, participants were asked “how much you agree or disagree with the description of your thoughts, feelings or experiences at this moment?” on a scale from 1 (strongly disagree) to 5 (strongly agree). Items are included in Table 1.

Results

As normality testing for the questionnaire data revealed several violations, we present nonparametric tests. We first assessed group differences on demographic and trauma variables. The four samples did not differ on age, Kruskal-Wallis test, χ^2(3) = 1.15, p = .76, but did differ on education level, χ^2(3) = 16.28, p = .001. Pairwise comparisons indicated that PTSD patients reported significantly less education compared with healthy controls (p = .001) and simulators (p = .021). All other comparisons of demographic factors were not significant. The groups differed significantly on trauma history as indexed by the TEC, χ^2(3) = 58.96, p < .001, though pairwise comparisons indicated that neither the PTSD and DID patients (p = 1.00) nor the healthy controls and simulators (p = 1.00) differed significantly from each other. Both PTSD and DID patients scored significantly higher compared with healthy controls and simulators (all ps < .001). Simulators, who were not instructed to simulate on these measures, did not differ from healthy controls on demographic/trauama variables; therefore both groups were combined in subsequent analyses.

Initial Evaluation of the Dutch Version of the TAQ

In the full sample, alphas were excellent for five of the six TAQ scales and comparable with those found in English-speaking samples (DePrince et al., 2010; DePrince et al., 2011); betrayal = .92; self-blame = .85; alienation = .92; anger = .87; shame = .96. Cronbach’s alpha was unsatisfactory for the fear scale (.58). Upon examination of interitem correlations, one item was inconsistent (“It’s as if I’m in a horror movie and can’t get out”). Removing this item markedly improved the internal consistency (.92). Thus, we proceeded by taking an average of the five items for each scale.
except the fear scale, in which 4 items were averaged. Table 2 provides descriptive statistics.

To assess criterion-related validity, we conducted a series of nonparametric Mann–Whitney tests comparing the clinical participants (PTSD and DID groups) to the nonclinical participants on each of the TAQ scales, using a Bonferroni adjusted p value of .008 (see Table 2). Demonstrating concurrent validity, we found significant differences across all comparisons.

### Table 1

**TAQ Items That Were Translated Into Dutch**

<table>
<thead>
<tr>
<th>TAQ scale</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betrayal</td>
<td>The people that I was supposed to trust the most hurt me.</td>
</tr>
<tr>
<td></td>
<td>The person who was supposed to be closest to me hurt me the most.</td>
</tr>
<tr>
<td></td>
<td>Important people (such as parents, partner, friend) let this happen to me.</td>
</tr>
<tr>
<td></td>
<td>If the person really cared about me that person would not have done what they did.</td>
</tr>
<tr>
<td></td>
<td>Someone important (such as a parent, lover, friend) should have kept me safe.</td>
</tr>
<tr>
<td>Self-blame</td>
<td>I am responsible for what happened.</td>
</tr>
<tr>
<td></td>
<td>I feel responsible.</td>
</tr>
<tr>
<td></td>
<td>If I were good enough, then this wouldn’t have happened to me.</td>
</tr>
<tr>
<td></td>
<td>The event happened because I wasn’t careful enough.</td>
</tr>
<tr>
<td></td>
<td>I deserve what happened to me.</td>
</tr>
<tr>
<td>Fear</td>
<td>Danger is always present.</td>
</tr>
<tr>
<td></td>
<td>I am not safe.</td>
</tr>
<tr>
<td></td>
<td>I feel afraid.</td>
</tr>
<tr>
<td></td>
<td>I don’t know whether I will live or die.</td>
</tr>
<tr>
<td></td>
<td>It’s as if I am in a horror movie and can’t get out.</td>
</tr>
<tr>
<td>Alienation</td>
<td>I feel lonely.</td>
</tr>
<tr>
<td></td>
<td>There is a huge void inside me.</td>
</tr>
<tr>
<td></td>
<td>Even though I have friends, I am still lonely.</td>
</tr>
<tr>
<td></td>
<td>I mostly stay to myself.</td>
</tr>
<tr>
<td></td>
<td>I am disconnected from people.</td>
</tr>
<tr>
<td>Anger</td>
<td>I feel rage.</td>
</tr>
<tr>
<td></td>
<td>I feel violent.</td>
</tr>
<tr>
<td></td>
<td>I feel angry.</td>
</tr>
<tr>
<td></td>
<td>I want to physically hurt the people or thing that made the event happen.</td>
</tr>
<tr>
<td></td>
<td>I am always ready to attack.</td>
</tr>
<tr>
<td>Shame</td>
<td>No shower can wash away how dirty I felt.</td>
</tr>
<tr>
<td></td>
<td>It’s as if my insides are dirty.</td>
</tr>
<tr>
<td></td>
<td>I feel embarrassed.</td>
</tr>
<tr>
<td></td>
<td>I feel disgust.</td>
</tr>
<tr>
<td></td>
<td>I feel ashamed.</td>
</tr>
</tbody>
</table>

* Item was deleted because of low internal consistency with other fear scale items.

### Table 2

**Descriptive Statistics for Comparisons Across Clinical (n = 39) and Nonclinical (n = 57) Groups**

<table>
<thead>
<tr>
<th>TAQ scale</th>
<th>Group</th>
<th>Median</th>
<th>Mean</th>
<th>SD</th>
<th>U</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betrayal</td>
<td>Clinical</td>
<td>4.30</td>
<td>4.10</td>
<td>0.94</td>
<td>186.50</td>
<td>−6.89***</td>
</tr>
<tr>
<td></td>
<td>Nonclinical</td>
<td>1.40</td>
<td>1.87</td>
<td>1.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-blame</td>
<td>Clinical</td>
<td>2.90</td>
<td>2.86</td>
<td>1.19</td>
<td>424.50</td>
<td>−5.17***</td>
</tr>
<tr>
<td></td>
<td>Nonclinical</td>
<td>1.40</td>
<td>1.61</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td>Clinical</td>
<td>3.58</td>
<td>3.42</td>
<td>1.16</td>
<td>159.50</td>
<td>−7.30***</td>
</tr>
<tr>
<td></td>
<td>Nonclinical</td>
<td>1.00</td>
<td>1.35</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alienation</td>
<td>Clinical</td>
<td>4.00</td>
<td>3.88</td>
<td>0.83</td>
<td>134.00</td>
<td>−7.32***</td>
</tr>
<tr>
<td></td>
<td>Nonclinical</td>
<td>1.40</td>
<td>1.82</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shame</td>
<td>Clinical</td>
<td>4.40</td>
<td>3.99</td>
<td>1.15</td>
<td>97.50</td>
<td>−7.82***</td>
</tr>
<tr>
<td></td>
<td>Nonclinical</td>
<td>1.00</td>
<td>1.34</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>Clinical</td>
<td>3.40</td>
<td>3.31</td>
<td>1.02</td>
<td>205.00</td>
<td>−6.85***</td>
</tr>
<tr>
<td></td>
<td>Nonclinical</td>
<td>1.20</td>
<td>1.56</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Participants rated TAQ items on a scale of 1 (**strongly disagree**) to 5 (**strongly agree**).

*** p < .001.

### Distinguishing PTSD and DID Patients

Next, we tested whether posttrauma appraisals distinguished PTSD and DID groups. Table 3 shows the Spearman’s rank order correlations among predictors, including demographic control variables (age, education). Using a binary logistic regression, we entered the demographic control variables in the first step and the six TAQ scale scores in the second step. The full model was not significant for the first step, χ²(2) = 6.85, p = .01. On the second step, the full model was significant, χ²(8) = 17.33, p = .03, with 87% of cases correctly classified. As detailed in Table 4, appraisals of alienation significantly distinguished the two groups such that the DID group reported higher levels of alienation than the PTSD group.

### Table 3

**Zero-Order Spearman’s Rank Order Correlations Among Predictor Variables Used in Logistic Regression**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age</th>
<th>Betrayal</th>
<th>Self-blame</th>
<th>Fear</th>
<th>Alienation</th>
<th>Shame</th>
<th>Anger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>.01</td>
<td>−.13</td>
<td>−.07</td>
<td>.03</td>
<td>.03</td>
<td>−.12</td>
<td>−.34*</td>
</tr>
<tr>
<td>Age</td>
<td>.25</td>
<td>−.26</td>
<td>−.04</td>
<td>.00</td>
<td>.00</td>
<td>−.12</td>
<td></td>
</tr>
<tr>
<td>Betrayal</td>
<td>−.09</td>
<td>.32*</td>
<td>.34*</td>
<td>.16</td>
<td>.46*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-blame</td>
<td>.52**</td>
<td>.36*</td>
<td>.58***</td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td>.65***</td>
<td>.62***</td>
<td>.33*</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alienation</td>
<td>.46**</td>
<td></td>
<td></td>
<td>.43**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shame</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05. ** p < .01. ***p < .001.
The cross-sectional design does not permit us to evaluate the direction of the alienation–DID relationship; however, the presence of this link between alienation and DID diagnosis when controlling for other common posttraumatic appraisals is noteworthy. Indeed, other common posttrauma appraisals (i.e., fear, anger, shame, self-blame, betrayal) did not distinguish the PTSD and DID groups. These negative appraisals may be linked with trauma responses more generally or with symptoms that are shared across diagnoses. However, elevations in alienation may reflect something more unique to DID, potentially associated with identity alterations that underpin a lack of integrated self-representation. In addition to controlling for other appraisals, the alienation–DID link is present in a sample where participants in both the DID and PTSD groups had histories of interpersonal abuse. Also, the results indicated comparable scores in both groups on the TEC. Thus, the link does not appear to be an artifact of differences in abuse experience, as measured by the TEC. That said, the small sample size may have resulted in low power to detect differences in trauma history or effects in other appraisals. Future work should endeavor to not only increase the sample size in each group, but determine the degree to which samples are representative of their target population. This may be especially important when using PTSD as a comparison group, given the variable etiology and clinical features in PTSD (see Friedman, Keane, & Resick, 2014). Moreover, the lack of inclusion of a reliable instrument to exclude a diagnosis of DID in the control groups was a limitation in the current study that should be addressed in future studies. In addition, recruitment of a healthy general population group that had experienced childhood abuse and neglect but did not have DID or PTSD would allow the impact of trauma versus trauma pathology (e.g., dissociation) to be examined on variables like alienation.

The current findings suggest addressing experiences of alienation—as characterized by disconnection, loneliness, and emptiness—may be particularly important for clients diagnosed with DID. Importantly, this study included a distinct PTSD sample without DID, allowing us to evaluate whether appraisals differed from DID. With additional appraisals in the model and with a sample of adults who had all been exposed to interpersonal abuse, alienation distinguished the DID group from the PTSD group, pointing to the value of future research on alienation and dissociation.

## Discussion

Drawing on data from patient and control groups, we found evidence for the validity and internal consistency of a Dutch short-form version of the TAQ. While past research used continuous measures of symptoms and appraisals to suggest that both betrayal and alienation appraisals were linked with dissociation symptom severity, we tested whether various posttrauma appraisals (shame, self-blame, fear, betrayal, alienation, anger) distinguished participants who met criteria for DID from a non-DID PTSD group. Betrayal appraisals did not distinguish the two patient groups; however, alienation appraisals did. Though participants in both the DID and PTSD groups were exposed to significant interpersonal abuse, the DID group reported stronger agreement with the alienation items relative to the PTSD group. Consistent with earlier conceptions of alienation (Newman, Riggs, & Roth, 1997), alienation items comprised a cluster of experiences in which people report feeling set apart. In the case of the particular items tested in this short form of the TAQ, feeling set apart is characterized by disconnection from others (I am disconnected from people; Even though I have friends, I am still lonely; I mostly stay to myself), disconnection from self/emptiness (There is a huge void inside me), and experiences of loneliness (I feel lonely; Even though I have friends, I am still lonely). These items emphasize loneliness, raising interesting future research questions about the degree to which alienation broadly and/or loneliness specifically relate to posttraumatic outcomes.

The findings point to the potential importance of alienation in initiating and/or maintaining the psychological symptoms captured by DID criteria. For example, abuse-related appraisals that involve disconnection from self and others (including accompanying loneliness and emptiness resulting from that disconnection) may contribute to reported problems of memory (e.g., ego-alien memory retrieval; Dorahy & Huntjens, 2007) and identity common in DID. Further, individuals who experience DID symptoms may experience loneliness and emptiness that contribute to their experiences of disconnection from self and others. The finding of heightened alienation in DID is consistent with the severe alterations in sense of self thought to characterize the disorder (Reinders et al., 2003). In addition, the severe nature of symptoms in DID may have a negative impact on people’s social networks, leading to disconnection from others.

The cross-sectional design does not permit us to evaluate the direction of the alienation–DID relationship; however, the presence of this link between alienation and DID diagnosis when controlling for other common posttraumatic appraisals is noteworthy. Indeed, other common posttrauma appraisals (i.e., fear, anger, shame, self-blame, betrayal) did not distinguish the PTSD and DID groups. These negative appraisals may be linked with trauma responses more generally or with symptoms that are shared across diagnoses. However, elevations in alienation may reflect something more unique to DID, potentially associated with identity alterations that underpin a lack of integrated self-representation. In addition to controlling for other appraisals, the alienation–DID link is present in a sample where participants in both the DID and PTSD groups had histories of interpersonal abuse. Also, the results indicated comparable scores in both groups on the TEC. Thus, the link does not appear to be an artifact of differences in abuse experience, as measured by the TEC. That said, the small sample size may have resulted in low power to detect differences in trauma history or effects in other appraisals. Future work should endeavor to not only increase the sample size in each group, but determine the degree to which samples are representative of their target population. This may be especially important when using PTSD as a comparison group, given the variable etiology and clinical features in PTSD (see Friedman, Keane, & Resick, 2014). Moreover, the lack of inclusion of a reliable instrument to exclude a diagnosis of DID in the control groups was a limitation in the current study that should be addressed in future studies. In addition, recruitment of a healthy general population group that had experienced childhood abuse and neglect but did not have DID or PTSD would allow the impact of trauma versus trauma pathology (e.g., dissociation) to be examined on variables like alienation.

The current findings suggest addressing experiences of alienation—as characterized by disconnection, loneliness, and emptiness—may be particularly important for clients diagnosed with DID. Importantly, this study included a distinct PTSD sample without DID, allowing us to evaluate whether appraisals differed from DID. With additional appraisals in the model and with a sample of adults who had all been exposed to interpersonal abuse, alienation distinguished the DID group from the PTSD group, pointing to the value of future research on alienation and dissociation.

## References


Dorahy, M., & Huntjens, R. J. C. (2007). Memory and attentional processes in dissociative identity disorder: A review of the empirical liter-


Received January 21, 2015
Revision received May 18, 2015
Accepted May 26, 2015