

# PTSD symptom changes in refugees

*PTSD symptom changes after immigration:  
A preliminary follow-up study in refugees*

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## Abstract

Extreme traumatic events such as a threatened death or serious injury are common experiences for refugees, many of whom display levels of Post-traumatic Stress Disorder (PTSD). Our preliminary investigation of 19 refugees examined whether acceptance of an individual application for Convention Refugee status is a factor in recovery from PTSD. Based on the traumatic experiences identified with the Harvard Trauma Questionnaire, differential rates of recovery from PTSD and generalized distress were prospectively compared in refugees who had either received acceptance in their application for refugee status (n = 10) or had been denied status (n = 9). PTSD was diagnosed according to criteria outlined in the DSM-IV and distress was measured with the Brief Symptom Inventory.<sup>1-3</sup> Unique to this study was the assessment of the refugee Claimant prior to his or her individual appearance before the Immigration and Refugee Board in Canada. The data support the hypothesis that a positive outcome for the hearing would significantly relate to a reduced DSM-IV PTSD symptom count and to a reduced generalized distress. Participants who received a positive hearing outcome showed significant recovery relative to those who were denied refugee status. Notwithstanding the small sample size, the

results are discussed in terms of how the promise of future freedom from persecution combines with making actual disclosures before the Immigration and Refugee Board to start the process of rehabilitation.

*Key words:* PTSD, depression, refugee, rehabilitation, cognitive-behavioural therapy, hearing

## Introduction

It is widely recognized that the incidence of psychiatric disorders is significantly higher among immigrants and refugees. In fact, the reporting of physical and psychological trauma is required for an individual to claim legal recognition as a refugee. The high rate of Posttraumatic Stress Disorder (PTSD) among refugees is not surprising. The prevalence of PTSD in refugees is usually reported to range from approximately 25% to 70%.<sup>2, 4-6</sup> Relatively high rates of PTSD are found among refugees after resettlement.<sup>7-10</sup> Although epidemiological data for PTSD has established the expected prevalence for this disorder, little longitudinal research has been done on PTSD among refugees.

An extensive amount of literature documents the psychological status of Convention Refugees once they take residence in the new country. No research has yet examined resettled refugees both prior to and following the Immigration and Refugee Board

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hearing which determines whether the refugee receives permanent resident status. This is surprising given that an analysis of the long-term course of PTSD in affected persons is essential for treatment. Weine et al. examined the course of PTSD in this population after North American resettlement.<sup>8</sup> They assessed 34 Bosnian refugees during the early phase of their resettlement in Connecticut. Each of the refugees was diagnosed with PTSD and was assessed one year later. At the 1-year follow-up, 15 of the 25 participants still met the criteria for PTSD. Even though all 25 participants showed significant decreases on severity, eight showed increases in the number of PTSD symptoms.

Several other studies have indirectly addressed the issue of the prognosis of PTSD. Ekblad and Roth examined the incidence of PTSD in multicultural immigrant and refugee patients in the analysis of the efficacy of treatment interventions.<sup>7</sup> At the 1-year follow-up, following the completion of treatment, two-thirds of the patients were still diagnosed with PTSD. These results are significant as the majority of immigrants and refugees were still experiencing PTSD symptoms even after receiving treatment indicating the treatment-resistant nature of PTSD in this population. Another study that is worthy to note was carried out by the Harvard Program in Refugee Trauma; it too involved psychiatric intervention over a 6-month time period.<sup>6</sup> Their sample of 52 Southeast Asian refugees showed only modest symptom improvement at post-test. Confounding variables, including variables associated with the migration process and with bereavement, may explain the apparent chronicity of PTSD in this population.

The present research was designed as a preliminary investigation into the course of distress and PTSD among refugees who file individual applications for Convention Refu-

gee Status or Humanitarian and Compassionate review. Participants were assessed both before and after testifying at their individual hearing before the Immigration and Refugee Board or after presenting a brief before the Federal Court (in addition to the initial hearing). A refugee hearing, itself, can be construed as an intervening variable between the baseline and follow-up assessments. The study addressed, therefore, whether the severity of PTSD and severity of distress changed relative to interventions where the Claimant had been required to present written and oral testimony to a lawyer and immigration officials.

## Methodology

### *Participants*

The participants were 19 Convention Refugee Claimants, drawn from consecutive legal referrals to a community-based forensic psychologist over a 48-month period. The small sample was deemed acceptable since the research objective was to conduct only a preliminary investigation. All contacted individuals agreed to participate and each person followed through; there was no attrition. For each participant a psychological assessment had been requested by the attorney representing the Claimant. Each Claimant met the criteria for PTSD in a structured interview and each had completed the Brief Symptom Inventory as part of the forensic evaluation (BSI).<sup>3</sup> After the hearing the individual was contacted by the first author (research assistant) and asked to consent to participate in this research; thus, each participant was assessed twice. The first (assessment) interview was conducted by the forensic psychologist and the second (research) interview by the first author. The research assistant knew the legal status of the refugee at the time of the second interview. There were two reasons for the initial psychological

evaluation: First, all Claimants were assessed for the same reason, to determine whether the well-founded fear of persecution and the psychological status of the individual would preclude his or her ability to live a psychologically healthy life by relocating within the country of origin. Second, for those Claimants who were refused refugee status at the hearing, the legal question was different and took one of two forms: a) the Claimant was asked if he or she would face unusual, disproportionate and undeserved psychological adversity if returned to the country of origin or b) the Claimant was asked if the history of suffering was so extreme as to leave him or her facing unusual psychological risks in every region of the country of origin. Thus, all participants had made claims before the Canadian Immigration and Refugee Board to the effect that each believed that he/she met criteria laid out in the Geneva Convention.

In some cases it was necessary for an interpreter to be present at the interviews if the Claimant was not fluent in English. Before the research phase, each Claimant was asked for written, informed consent to participate in the research.

Of 19 individuals who agreed to participate in the follow-up assessment 10 had received Board acceptance as Convention Refugees while 9 had been denied refugee status and were awaiting further legal proceedings. There were 13 males and 6 females; 12 participants were married. The mean age of the participants was 33.6 years; their ages ranged from 22 to 54 years. The country of origin for the participants included Pakistan ( $n = 6$ ), Bangladesh ( $n = 3$ ), Ghana ( $n = 3$ ) to India ( $n = 2$ ). The remaining five participants were from Lebanon, Yugoslavia, Trinidad, Nicaragua and Syria. The mean time period between the baseline clinical interview and the follow-up reassessment was 13

months ( $SD = 10$  months) while the average elapsed time between entry into Canada and the research interview was 36 months ( $SD = 7$  months). The small sample size precluded matching of groups on variables such as the number of traumatic events, or length of time between refugee hearing and the second clinical interview.

### Materials and design

The forensic assessment had been performed over 1 to 2 sessions, each lasting 2 to 3 hours. All 19 participants met the full criteria for PTSD.<sup>1</sup> The frequency of DSM-IV symptoms on Criteria D, E, and F were recorded using PTSD Symptom Checklist (SCID); this enabled the estimation of PTSD symptom severity at follow-up. Included in the baseline clinical assessment was an exploration of the history of traumatic experiences constituting the fear of persecution, as well as an administration of the BSI and Section I of the Harvard Trauma Questionnaire (HTQ).<sup>1-3</sup> The HTQ is widely used in the assessment of refugee trauma. This questionnaire is given in three sections covering a delineation and description of traumatic experience as well as the rating of DSM-IV criteria for PTSD. Interrater reliability exceeds 0.90 and 1-week test-retest reliability is 0.92 for the rating of the incidence of trauma events. The BSI was administered to measure degree of overall psychological distress. Global Distress was measured on the BSI with the Global Severity Index (GSI) – which averages severity across 9 symptom dimensions – and the Positive Symptom Distress Index (PSDI) – which averages severity across all 53 items. The BSI is a 53-item, self-report symptom inventory. The parent instrument of the BSI, the Hopkins Symptom Checklist-25 (HSCL-25), has been well-validated as a measure of generalized distress.<sup>11-13</sup> Each BSI symptom

item was rated on a 4-point scale ranging from not at all (0) to extremely (4) for the degree that it is experienced within the past seven days. The BSI manual reports test-retest reliability for GSI and PSDI of 0.90 and 0.87, respectively. Positive utility of these measures has been found in previous PTSD research.<sup>7, 14, 15</sup>

At follow-up, PTSD and BSI responses were again evaluated. One accepted Claimant did not complete the second BSI.

### Analysis

Paired-samples t-tests were used to analyze group changes between baseline and follow-up on PTSD, PSDI, and GSI measures.

### Results

Because this is a preliminary and small sample, the hearing outcome, pre-hearing, and post-hearing diagnoses of PTSD, and measures of trauma are presented for each participant in Table 1.

The two groups were not statistically different with regard to baseline PTSD symptom checklist frequencies, and scores on the BSI and the HTQ. No significant correlations were found between age and the dependent measures ( $p > 0.05$ ). Of 17 traumatic experiences specified in the HTQ the mean number of distinct traumatic situations experienced by the participants was 5.00 with a range from 3 to 10. The mean of total traumatic HTQ incidents experienced was 14.10. (Each traumatic situation might have been repeated yielding multiple incidents per refugee. For example, a person may have been imprisoned 5 times to yield 5 incidents.) The four most frequent traumatic experiences (facts accepted by the Immigration and Refugee Board) were torture or assault (89% of participants), serious injury (74%), witnessing murder of friend or family (58%), and witnessing murder of a stranger or strangers (47%).

The present study demonstrated that

**Table 1.** PTSD and scores on measures of trauma at baseline (T1) and follow-up (T2).

Refugee	Refugee status	Months since hearing	PTSD		SCID		PSDI		GSI	
			T1	T2	T1	T2	T1	T2	T1	T2
1	Y <sup>a</sup>	24	Y	N	15	1	3.50	1.00	3.10	0.08
2	Y	<1	Y	Y	14	11	2.20	2.77	2.80	2.77
3	Y	12	Y	N	12	3	3.00	1.54	2.50	1.02
4	Y	<1	Y	N	12	4	2.55	1.15	1.39	0.43
5	Y	3	Y	N	9	3	2.71	1.20	0.75	0.34
6	Y	10	Y	N	13	6	3.81	2.50	2.28	0.38
7	Y	33	Y	N	11	0	2.55	1.25	1.39	0.09
8	Y	1	Y	N	15	4	2.49	1.59	2.02	1.02
9	Y	3	Y	N	13	0	1.98	3.00	1.76	0.06
10	Y	1	Y	N	12	4	-	-	-	-
11	N	9	Y	Y	15	11	3.45	2.28	3.30	1.58
12	N	8	Y	Y	12	11	2.75	2.21	2.49	2.21
13	N	1	Y	Y	10	13	2.70	1.78	2.30	1.37
14	N	4	Y	Y	11	13	2.80	5.83	2.72	5.00
15	N	1	Y	Y	10	13	2.70	2.24	2.30	1.94
16	N	7	Y	Y	12	11	2.80	2.37	2.00	1.37
17	N	9	Y	N	11	6	2.00	1.83	1.77	1.38
18	N	1	Y	Y	11	14	2.46	2.25	2.37	2.21
19	N	4	Y	Y	11	13	2.70	2.67	2.60	2.57

<sup>a</sup>) Throughout, Y is positive for the category and N is negative. For example, a Y status indicates acceptance of the refugee claim.

when the Immigration and Refugee Board designates the individual as a Convention Refugee this can be critical leading to a reduction in the symptom expression in PTSD and in the general levels of distress in refugee Claimants. Positive hearing outcomes had significant positive relationships to PTSD and distress reduction first brought on by the experience of trauma. As shown in Table 2 and discussed below the paired t-test showed positive distress level changes from baseline to follow-up for those accepted but not for those denied status.

#### PTSD

There were no significant baseline differences between the groups in baseline PTSD symptom checklist frequencies. All participants met DSM-IV criteria for PTSD. The mean number of Criteria D, E, F symptoms for PTSD was 11.9 with a range of 9 to 15. One quarter of the refugees endorsed more than 14 of the 17 PTSD criteria D, E, and F symptoms.

At follow-up (Table 2), after the hearing, the attainment of Convention Refugee status was related to a decreased rate of PTSD diagnosis and to a decreased PTSD symptom count. Of 10 participants who had been

accepted as Convention Refugees only one still met the criteria for PTSD at the time of the research interview. Twenty percent of those accepted no longer displayed any symptoms of PTSD. The significance of the decrease in PTSD symptoms at follow-up was confirmed by paired t-test ( $t(9) = 9.16, p < 0.01$ ). The 95 percent confidence interval of the difference was 6.85-11.34. In contrast, the denial of Convention Refugee status at follow-up failed to relate significantly to either PTSD diagnosis or to symptom frequency change (paired t-test,  $p \geq 0.05$ ). Eight of the 9 Claimants who were denied Convention Refugee status still met the criteria for PTSD when reassessed. Among denied Claimants the most frequently reported PTSD symptoms included efforts to avoid thoughts, feelings, conversations, activities, places or people that arouse recollections (40%) and sleep impairment (40%). Thirty-three percent of refugees whose claims were denied endorsed 14 of the 17 PTSD symptoms. All reported experiencing recurrent intrusive distressing recollections as well as dreams, intense distress upon exposure to cues, efforts avoiding thoughts, feelings or conversations and places that arouse recollections, detachment or estrangement, and sleep impairment.

**Table 2.** Analysis of trauma scores at initial interview and follow-up

Variable		Baseline		Follow-up		Paired t-test
		M	SD	M	SD	
PTSD	Accepted	14.60	1.84	5.50	2.99	9.16 **
	Denied	13.44	1.51	13.89	2.57	0.65
PSDI <sup>a</sup>	Accepted	2.69	0.47	1.78	0.78	2.50 *
	Denied	2.71	0.38	2.61	1.24	0.24
GSI <sup>a</sup>	Accepted	2.12	0.73	0.77	0.83	5.35 **
	Denied	2.43	0.44	2.18	1.14	0.69

\*  $p < .05$ , two-tailed. \*\*  $p < .01$ , two-tailed.

<sup>a</sup> One participant who was denied status had not completed the BSI.

PSDI and GSI

At baseline, the mean for PSDI was well above the suggested cutoff for significant distress of 8 and there were no significant differences between the groups on either PSDI or GSI. At follow-up, results indicate a positive association between hearing outcomes and levels of global distress. Accepted Claimants showed reduced PSDI levels at the time of the research interview relative to baseline ( $t(9) = 2.50, p < 0.05$ ). The 95 percent confidence interval of the difference was 0.07-1.75. No change was seen among denied Claimants.

Similar results were demonstrated on the GSI scores. Symptom reductions from baseline were found for those who were accepted ( $t(9) = 5.35, p < 0.01$ ) but not for those who had been denied ( $p > 0.05$ ). The 95 percent confidence interval of this significant difference was 0.77-1.94.

## Discussion

Few prospective studies have been conducted on the course of PTSD and general symptom distress in a refugee population starting at a point prior to legal resolution of the refugee claim. The refugees in the present study were similar to those studied elsewhere; the majority had been detained or imprisoned and tortured by state authorities or by individual persons acting out their loyalty to religious or political affiliations. Nearly all Claimants had legally accepted physical evidence of assault and torture and most had received medical care relative to PTSD and major depression. Nearly half had witnessed the homicide of others in the same circumstance while more than half had witnessed the homicide of a family member. The Canadian Immigration and Refugee Board had concluded that each Claimant had asserted a credible fear of persecution. All had migrated internally before fleeing to another country.

The data suggest that the acceptance of an application for Convention Refugee status may have a significant impact on the course of PTSD and generalized distress. Positive outcomes of the refugee hearing were associated with PTSD remission and the reduction of distress due to prior traumatic events. The follow-up revealed significant reductions of symptom distress among those 10 Claimants who had received positive legal decisions on their claims compared to baseline assessments. Moreover, the only (accepted) Claimant who still met the criteria for PTSD at follow-up had only received notification of his acceptance a few weeks prior to our reassessment. By comparison, the denial of a Claimant's application for Convention Refugee status was consistently associated with both maintained levels of PTSD and with severe psychological distress. The group of 9 participants who were denied Convention Refugee status showed no change in PTSD status and generalized distress levels at the time of the research interview.

It should be emphasized that PTSD symptoms were not eliminated among accepted Claimants. It appears simply that with the alleviation of apprehensions about the future, these persons became less likely to focus on the past. Unfortunately, it was not possible to collect behavioral data from all Claimants on work performance, leisure enjoyment, and other behavioral indices of symptomatic improvement.

These substantial improvements in mental health appear attributable to both an intervening process variable, the formal refugee hearing, and to the outcome of the hearing. When taken with other published research on settled refugees, our data suggest that the assurance of security in the host country combines with the individual refugee hearing itself to facilitate mental health

improvement. The provision of safety does not appear to be a sufficient condition for rehabilitation.

Convergent evidence in support of this logic stems from survey studies of resettled refugees. Among refugees who may not have received a formal hearing in the host country, the rates of PTSD remain high, even over a long term. Unfortunately, researchers do not generally provide sufficient subject history to indicate if the refugee ever appeared individually before a refugee board. For instance, in a study of Cambodian refugees, 1-year after resettlement, 60% still met the criteria for PTSD but the manner in which they obtained refugee status is unknown.<sup>6</sup>

It appears that the individual claims were not made and that resettlement to North America had been expedited with consideration of a group of persons following their departure from refugee camps in Thailand. In other words, after the identities and proof of citizenship had been evaluated, the group as a whole may have been granted refugee status on the basis of the known and accepted plight of the class of persecuted Cambodian persons. When this occurs, such Claimants may never formally present the full (verbal and written) personal beliefs which underlie the fear of persecution. Similarly, in the recent survey of Bosnian refugees in Australia, 70% had PTSD. Again the researchers did not clarify this point, but it is likely that the high levels of residual PTSD will arise in a group whose claims are never processed on an individual basis.<sup>9</sup> In yet another study of persons whose claims had likely been expedited, Carlson and Rosser-Hogan examined the mental health status of Cambodian refugees 10 years subsequent to resettlement and found PTSD in 86% of 50 adults.<sup>16</sup>

A malingered interpretation for the present data is possible: it is possible that

PTSD symptoms in our cohort of denied Claimants remained over-reported at the time of the follow-up assessment because of their possible benefit for future legal recourse. This explanation is not favored in light of the more obvious fact that most of our full sample of Claimants had accepted evidence of assault and torture; if denied, a Claimant is returned and can reasonably expect future, additional trauma. Importantly, once the history of torture is accepted in a hearing it does not have to be re-determined; and, continued rumination about the details of persecution for those Claimants in our denied cohort would not, therefore, affect the outcome of future case appeals or a Federal Court appeal. Those appeals are made on other grounds and do not revisit the original legal question of whether the individual has a reasonable fear of persecution in any part of the country of origin. It is not initially relevant if an individual is upset while residing in Canada.

The literature on domestic trauma and civil and criminal law has a bearing on our understanding of the present results. Some studies have examined the relationship between the outcome of a civil or criminal trial and the recovery from motor vehicle accident and sexual assault traumas.<sup>17-19</sup> The Albany MVA project examined accident-related predictors of the development and chronic suffering from PTSD among motor vehicle accident victims.<sup>17</sup> The best predictor of the presence of PTSD symptoms 1-4 months after an accident was the status of any ongoing litigation and at a 12-month follow-up. Those MVA survivors whose litigation settlements were settled (positively or negatively) had lower PTSD symptom levels than those whose litigation settlements were still pending. These data support our thinking that the completion of an individualized court process may promote recovery from trauma.

Similar inferences are possible in research on victims of sexual assault. Sales et al. performed one of the only studies examining the relationship between the victims of sexual assault recovery and legal outcomes.<sup>18</sup> In line with the present reasoning, a decision by a sexual assault victim to prosecute appears to be associated with better long-term adjustment and higher self-esteem – irrespective of the outcome of prosecution. This is an outcome. Significantly, persons who prosecute are not differentiated from those who do not prosecute by baseline psychological adjustment measures such as self-esteem, depression or social adjustment.<sup>19</sup> Methodological problems in this research still make causal conclusions impossible. For example, 85% of sexual assault cases do not result in prosecution and researchers generally do not compare those who do and those who do not prosecute. Simply laying charges should not be (but often is) considered a positive outcome; this is analogous to simply applying for refugee status.<sup>20</sup> A full comparison of the present results to the rape victimization studies is unfortunately not possible.

Still other variables may affect PTSD symptom recovery in refugees. These include the passage of time and acculturation.<sup>9,21</sup> The literature indicates that many refugees will show elevated levels of PTSD even after 10 years of resettlement. It is thus important to ask whether the formal hearing in some way combines with assurances of safety to affect symptom recovery. Based on the results of the present study one may tentatively conclude that non-specific factors, as reviewed by Rousseau, in the hearing itself may exert effects on the recovery from PTSD.<sup>22</sup> In fact, if a claim that a person has been persecuted is accepted this does not mean that the claim to Refugee status will also be accepted. For instance, it may be that the individual is deemed to have been

persecuted but that this person is denied refugee status if the Board determines that he has the ability to avail himself of state protection by moving to a different region of the country. In interpreting our results it is important to remember that persecution was accepted by the refugee board as part of the fact base for each participant in our study.

At the refugee hearing the individual is asked to tell his or her story. Hanscom indicates that one of the most powerful therapeutic influences on recovery from trauma is listening to the victim and enabling a person's written and verbal expression of emotions.<sup>23</sup> Telling and re-telling the story is integral to re-exposure, cognitive-behavior therapy, and writing-based treatments and is as important to therapy as it is to the very process of initially filing for refugee status.<sup>24-27,28</sup> Legal disclosures require a Claimant to write out and to talk about emotional and factual aspects of traumatic experiences, in explicit form, for multiple periods of 15-20 minutes, each, for 3-4 consecutive days before numerous different authorities. In addition, the Claimant may prepare with a lawyer for 3-20 hours and may even interview with a forensic psychologist for several hours. This, in itself, because it involves intentional re-exposure and emotional re-processing, may reduce distress and negative affect.<sup>24,29</sup> In fact, vividness of recall is associated with positive outcome in writing and re-telling therapies.<sup>29,30</sup>

Meta-analyses of therapy with trauma victims support these generalizations leaving the conclusion that the filing for refugee status has the core conditions of a writing and re-telling, cognitive therapy.<sup>8,24,27, 30-31</sup> Memory exposure and written expression of memory are critical to rehabilitation. For instance, Foa and her colleagues reported reductions in state anxiety, depression, and social adjustment resulting from prolonged

exposure and it is suggested that the effect of verbal disclosure is to enhance one's sense of control over the traumatic memory thereby producing increased self-confidence, self-esteem and self-efficacy.<sup>31</sup> Other treatment approaches involving writing and re-telling trauma memories have been used with female rape victims.<sup>30</sup> This approach allows for the articulation of the trauma into a verbal narrative, for enhancing clarity, and for reducing avoidance of the traumatic experience.<sup>24,29-31</sup> Reviews of effective trauma therapies describe eight effective cognitive-behavioural techniques, each involving disclosure.<sup>27,32-33</sup>

In preliminary studies it is important to remember that ethnicity imbalances (the majority of our participants were from the sub-Indian continent), small sample sizes, and gender imbalances may limit the generalizability of the findings. Thus, the present results would most confidently be applied to males from India, Pakistan and Bangladesh. Still, the findings may be taken to indicate a fruitful direction for future studies. Such future research must ask whether our data are attributable to sample size, ethnicity, our use of interpreters, the absence of back-translated symptom questionnaires, differences between individuals on the number of traumatic events, and time lags between entry into Canada and the second (research) interview.<sup>15,34</sup> It is not thought that these variables threaten the integrity of the study. However, work beyond this very preliminary investigation will require more experimental control.

Overall, however, our data may suggest that the individualized legal process can be rehabilitative. It requires the decision to file a legal application to become a Convention Refugee in the first place, together with intentional re-exposure to traumatic memory through re-writing and reviewing both the

emotional and factual aspects of the trauma, and the re-telling of the trauma to multiple audiences. All of these factors combine over time to promote adaptive coping in the same manner as formal cognitive-behavioural treatment. Sadly, for the person who is denied refugee status the process does not appear to have rehabilitative benefit rendering the conclusion that the claims process may be a necessary but not sufficient condition for the recovery of the Claimant. The promise of future safety also appears necessary for rehabilitation.

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This article is dedicated the memory of Maria deKrasinska, M.S.W. As a long-time champion for refugees, her work in Canada over roughly 20 years as a counselor of the victims of persecution and torture and her advocacy for the mental health of these persons enabled hope for many.

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