## Torture, Culture, War Zone Exposure, and Posttraumatic Stress Disorder Criterion A's Bracket Creep

The March 2007 article by Başoğlu et al[1] is certainly timely. However, we disagree with their assertion that findings from their study, which was designed specifically for use with European civilians exposed to a civil war, "are highly relevant"[1(p284)] for "international law" regarding interrogation procedures of terrorist-camp–trained detainees, eg, in Iraq and Afghanistan. The Başoğlu et al study has major methodological and conceptual limitations that severely limit its generalizability. Furthermore, the extremely broad conceptualization of Criterion A events that Başoğlu et al use arguably trivializes posttraumatic stress disorder (PTSD), doing an injustice to those who have experienced genuine torture or combat.

**Methodological Issues.** The Başoğlu et al study has several methodological limitations, especially with regard to sampling, content validity, and correlation computations.

*Sampling.* They state that "Once the interview was completed, each survivor was asked to list all friends or acquaintances with a similar trauma experience."[1(p278)] In other words, the study used linkage sampling. Such a sampling procedure may possess a risk of leading to a violation of the independence assumption based on which $F$ and $\chi^2$ tests were performed.

*Content Validity.* They state, "The stressors were grouped under 7 categories to facilitate comparison."[1(p279)] It seems that Başoğlu et al arbitrarily put the stressors into 1 of 7 categories. That is, the stressors existed before the categories. Figure 1 in the Başoğlu et al study presents mean (SD) distress and control ratings for the 7 stressor categories. Presumably, they simply took the averages of all the stressors within each category. One should keep in mind that when the categories were created as such, it is not possible to compare the means of 7 categories because the means depend on exactly which stressors were chosen to constitute the categories. Furthermore, Başoğlu et al may wish to perform a factor analysis to examine the unidimensionality of each category; however, their sample size may not be sufficient for factor analysis.

*Correlations.* Başoğlu et al reported correlations between distress and perceived control[1(p282)] but it was mentioned neither which correlation was computed nor whether conditional (partial) correlation or unconditional (simple) correlation was computed.

**Cross-cultural Issues.** Because of space limitations, we cannot adequately reference our counterarguments concerning the cultural, ideological, educational, and lifestyle differences between a liberal, formerly communist European culture and a fundamentalist Middle Eastern culture. However, defining characteristics of terrorist-camp–trained detainees, specifically fundamentalist religiosity and the belief in lavish rewards in the afterlife for fighting and especially dying for their cause, would be completely alien to the participants studied by Başoğlu et al. Extreme religiosity has been shown to diminish vulnerability to war-zone–related PTSD.[2] In sharp contrast to Operation Iraqi Freedom/Operation Enduring Freedom detainees, the European subjects studied by Başoğlu et al were acculturated during 45 years of official state atheism with firm belief in the finality of death. Furthermore, unlike their mostly civilian research subjects who were caught in the middle of a civil war, enemy combatants in Iraq and Afghanistan have chosen to take part in conflict with full knowledge of its risks and are willing not only to endure extreme hardship but also willing, even eager, to die for their cause.

**PTSD Criterion A "Bracket Creep" Issues.** In a recent editorial, Andreasen[3] argued that because of the broadening definition of psychological trauma in the transition from *DSM-III* to *DSM-IV*, "the concept of PTSD took off like a rocket, and in ways that had not initially been anticipated"[3(p1321)] and that "this broadening should be reconsidered"[3(p1322)] in *DSM-V*. The Başoğlu et al conceptualization of Criterion A events is exceptionally broad, even by the loose standards of *DSM-IV*. For example, in their "psychological torture" subcategory "deprivation of basic needs," they list conditions that are certainly not outside the range of human experience for militarily trained individuals (denial of privacy, prevention of personal hygiene, cold showers, forced standing, and infested surroundings). In a psychological torture subcategory "humiliating treatment," they lump together "verbal abuse" along with throwing of urine/feces at detainees. We can argue that the latter is worse than the former. Finally, in a psychological torture subcategory "psychological manipulations," they lump "fluctuations in interrogator attitude" alongside sham executions, threats of death, and witnessing the torture of close ones. We can argue that only the latter are Criterion A events.

The earlier-mentioned problem is further confounded by the use by Başoğlu et al of an overly broad definition of *physical torture*, which trivializes the meaning of the term. For example, in the "physical torture" category, they group *falaqa*, spanking on the soles of feet (a widespread form of parental discipline in the Middle East), together with "suffocation/asphyxiation," one of the most abhorrent forms of torture and a Criterion A event that almost invariably leads to PTSD. Again, we can argue that only the latter are Criterion A events. In light of the extremely broad definitions that Başoğlu et al have chosen for both "psychological torture" and "physical tor-

ture," their conclusion that the 2 torture categories "do not seem to be substantially different"[1(p284)] is arguably untenable.

The data collected by Başoğlu et al do, however, hold tremendous potential if reanalyzed based on recent research aimed at defining the *DSM-V* Criterion A (both A1 and A2) less broadly as proposed by Andreasen.[3] Persistent peritraumatic tachycardia may be the best available clinical sign of overall vagal withdrawal and locus ceruleus overactivity and may be a better predictor of subsequent PTSD than the current Criterion A2.[4,5]

Studying resilience and vulnerability in relation to warzone stressors sometimes requires new paradigms.[4,6] We urge Başoğlu et al to reanalyze their data steering clear of the Cartesian "physical vs psychological" dichotomies. They could obtain invaluable insights by ordinally ranking their psychological torture queries according to an a priori clinical consensus prediction of the likelihood that each of these forms of "psychological torture" will result in persistent tachycardia. Sham executions, threats of death, and witnessing the torture of significant others most likely would result in persistent tachycardia, while isolation, denial of privacy, and prevention of personal hygiene would not.

Last, but not least, we do want to compliment Başoğlu et al for drawing attention to uncontrollable (physical restraint–induced) immobility as a potential predictor of subsequent PTSD. Tonic immobility is a well-understood neurobiological phenomenon. We thus argue that it may serve as a non–self-report physical indicator of criterion A2 "helplessness" or, alternatively, as a component of the newly proposed Criterion A3. Objective, observable (non–self-report) signs of emotional states are sorely needed in *DSM-V*. Başoğlu et al may be able to conduct an analysis similar to the one we suggested earlier for tachycardia using the inescapable tonic immobility concept.

*H. Stefan Bracha, MD*
*Kentaro Hayashi, PhD*

**Correspondence:** Dr Bracha, National Center for Post Traumatic Stress Disorder, Department of Veterans Affairs, Pacific Islands Health Care System, Spark M. Matsunaga Medical Center, 3375 Koapaka St, Ste I-560, Honolulu, HI 96819-1800 (h.bracha@med.va.gov).
**Financial Disclosure:** None reported.
**Funding/Support:** This material is based on work supported in part by the Office of Research and Development, Medical Research Service, Department of Veterans Affairs, VA Pacific Islands Health Care System, Spark M. Matsunaga Medical Center. Support was also provided by a National Alliance for Research on Schizophrenia and Depression (NARSAD) Independent Investigator Award and the VA National Center for PTSD.
**Additional Contributions:** Caitlin Macy, Amber Russell, and Crystal Ishihara provided editorial assistance.

1. Başoğlu M, Livanou M, Crnobarić C. Torture vs other cruel, inhuman, and degrading treatment: is the distinction real or apparent? *Arch Gen Psychiatry*. 2007;64(3):277-285.
2. Kaplan Z, Matar MA, Kamin R, Sadan T, Cohen H. Stress-related responses after 3 years of exposure to terror in Israel: are ideological-religious factors associated with resilience? *J Clin Psychiatry*. 2005;66(9):1146-1154.
3. Andreasen NC. Acute and delayed posttraumatic stress disorders: a history and some issues. *Am J Psychiatry*. 2004;161(8):1321-1323.
4. Pitman RK, Delahanty DL. Conceptually driven pharmacologic approaches to acute trauma. *CNS Spectr*. 2005;10(2):99-106.
5. Bracha HS, Garcia-Rill E, Mrak RE, Skinner R. Postmortem locus coeruleus neuron count in three American veterans with probable or possible war-related PTSD. *J Neuropsychiatry Clin Neurosci*. 2005;17(4):503-509.
6. Bracha HS, Hayashi K. Resilience in the Aftermath of terrorism and during warzone exposure: is it religiousness or is it number of blood relatives? *J Clin Psychiatry*. 2006;67(7):1156; author reply 1156.