
LETTER TO EDITOR

**REFLECTIONS ON COLLABORATION WITH TUZLA IN THE FIELD
OF PSYCHOLOGY AND WAR: PAST, PRESENT AND FUTURE**

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For me personally, the first effect of the Yugoslavian wars was that my team, England, were given new opponents for their opening match of the European Championships in 1992. I was in fact there in Sweden as we struggled to hold Denmark to a goalless draw. So very disappointing it was, until, two weeks later, miraculously, the Danes won the whole caboodle! Then I could go round and say, "We held the European Champions to a draw!"

Little did I know then that the consequences of the war would eventually impinge on my life in a much more direct way too. To be honest, I should (blushingly) admit that until the tension exploded in Yugoslavia, I had never heard of Bosnia, not to mention Tuzla. But in 1994 both became rather salient in my life. My then fiancée, Ragnhild Dybdahl, casually announced one day that her first job after graduating as a psychologist would be running a centre for women in Tuzla. "Where?" "What?!!!" "There's a war on, you know!" But there was no stopping her and she went to Tuzla for 6 months. "Romantically" enough, we got married on the Saturday and she left on the Monday!!

Ragnhild had a personally and professionally enriching stay in Tuzla, and returned many times over the course of the following years, to carry out her PhD, evaluating a psychosocial programme for mothers and children in Tuzla. Senior psychiatrists at UKC greatly facilitated her work, which was published in three articles,¹⁻³ and she was awarded her PhD from the University of Tromsø in the far north of Norway in 2002. An amusing and telling aside is that a visitor to Bosnia during the war was so impressed with her clinical efforts, calling her a "young and very courageous psychologist"⁴

Around that time Ragnhild and I began to talk seriously of expanding the research collaboration in Tuzla, to incorporate more experimental approaches too. This is perhaps a natural trend, from directly clinical, almost what one might call emergency, research during and immediately after the war, evolving into research that can ask more fundamental long-term questions about the relationship between trauma and psychology. Another trend in our research projects in Bosnia has been to go beyond self-report measures, to measuring objective behaviour. The group of clinicians that during the war had run the Women's House in Tuzla in the old TB-hospital, were still working together, and were keen to collaborate. We began with research projects on basic cognitive mechanisms in trauma-exposed people, and it was fun to work with such an enthusiastic and industrious group.

Rather than large-scale correlational studies, we used experimental method, focussing on carefully-chosen samples. With such a causally-oriented approach one can, for instance, shed light on the mental mechanisms

involved in the maintenance of trauma pathology. One of our first studies investigated the occurrence of a memory illusion in trauma-exposed Bosnians⁵. There is a well-established effect that if one gives people a list of words to remember where all of them are thematically-related to a non-presented "lure" word, that they tend to mistakenly recall the lure word, thinking that it was presented. So a list beginning "Pillow, tired, bed, snore..." typically causes people to misremember that "sleep" was in the list. A currently-fashionable explanation is that the lure pops into your mind during the first phase; then, during recall, one recalls "sleep" because one knows that one thought of it recently, thus failing to distinguish between what you did hear and what you thought, a so-called "source-monitoring" error. We built on this effect by making such "trick"-lists in Bosnian, for both neutral words, e.g. man, sea, and for war-related words, e.g. bullet, mortar, blood. By testing two samples from Tuzla, one with a diagnosis of PTSD and the other who were war-exposed but without PTSD, we showed that for neutral words the groups were equally susceptible to the illusion, whereas for war-related words the PTSD group had more mistaken recall of the lure words. This shows that normal source-monitoring for neutral material may be retained in PTSD but that there may be a trauma-specific deficit: war words cause PTSD patients to distinguish less well between what they thought themselves and what they actually heard on the lists. That there is interest in this sort of research is shown by the fact that it is being cited in the literature and also that a review article recently cited it as a particularly important paper.⁶

Our first project in collaboration with UKC investigated adolescent autobiographical memory, and tested the following hypothesis: Does exposure to trauma at an early age lead to difficulty in retrieving memories from your life? Here we asked the question of whether exposure to trauma at an early age led to an inability to retrieve memories from one's life. Previous studies have asked the question, but either with small sample sizes, or with lots of different types of trauma, whereas Tuzla gave us the possibility of asking the question with a large sample that had experienced the same sort of trauma. In addition, in a second study we ascertained that the same pattern was obtained for adolescents from Vojvodina, Serbia, some of whom had been exposed to the NATO bombing in 1999 and some who had not. The conclusion of our forthcoming paper is that adolescents exposed to trauma in their youth are less able to remember events from their lives, and this occurs in the absence of psychopathology symptoms.⁷ Follow-up studies of these Tuzla participants will be able to answer the causal question of whether this relative inability to remember one's life gives rise to later psychopathology, as predicted by contemporary

theorists.^{8,9}

Another project in collaboration with UKC, where the data are in the process of being analysed, uses the experimental method to another purpose: to determine whether psychosocial help to mothers can measurably help their children. Here, a large group of mothers of disadvantaged children near Tuzla and Bratunac were randomly allocated to one of two groups: the Intervention group, or the Waiting-List control. By measuring the physical and mental health of the children before and after, one will be able to determine the effects of the intervention. The Waiting-List control group also received the intervention after the second measurement, thus avoiding that particular ethical problem, of randomising half of one's participants away from something that one suspects will help. This project was performed with funding from the Norwegian Council for Mental Health, and the Norwegian Ministry for Foreign Affairs, and was carried out in collaboration with UKC, and two NGOs, Horizonti in Tuzla and Forum Zene in Bratunac. The results of this project will be disseminated internationally when the analyses are complete (*Hasanović et al., in preparation*).

Research collaboration depends very much on good chemistry between the partners, and the fact that the Norway-Tuzla work on psychology and war stretches back over so many years indicates a certain compatibility. The horrors of the war have left Bosnia and not least Tuzla with rather unique access to a scientifically fascinating population: people who have been through severe traumas. In my opinion, a prominent weakness of the scientific literature in PTSD and trauma generally is that the traumas are often far too heterogeneous, poorly-defined, and the samples often too small to conclude with any certainty. In Tuzla, one has the opportunity to overcome these shortcomings. So the devastation the war brought to Bosnia brings also potential for methodological advantages in studies of psychology and war. There is an opening for top science in this field to emerge from UKC, in fact all fields studying the overlap between war and psychiatry. And this would bring advantages to Tuzla, Bosnia and the world. For UKC, it would provide a natural route into international collaboration, as well as helping other peoples that have, more recently, been dragged into war and its hideous psychological consequences. There is now in fact a steady stream of publications on these topics in international journals from psychiatrists in Tuzla.^{10, 11}

I have met many kind and interesting people in UKC, and had many fascinating experiences. It is of course somewhat hazardous to mention some by name, for where does one stop? However, I do wish to mention one: Nedret Mujkanovic. I greatly appreciated his warmth, energy, charm, and his support of our work in Tuzla. Nothing would please me more than to let him

inspire the future research effort on war traumas.

So far we have financed our Norway-Tuzla research collaboration from three sources, including the Norwegian Research Council, the Norwegian Council for Mental Health, and the Norwegian Ministry for Foreign Affairs, in addition to my universities' internal funding. I don't know why but it turns out that all three articles (including ours) that have appeared in the *Journal of Traumatic Stress* with one or more authors from Bosnia, also have co-authors from Norway. This may be a coincidence, but maybe we should interpret this as a tradition that should be exploited? Anyway, I think that it is time to take it up a notch and apply for serious funding, for example from the EU. The obvious reconciliatory and humanitarian benefits of the research must make it profoundly attractive to the EU, and such funding would make Tuzla a hub of trauma research.

With previous funding, we have, in addition to running research projects, also taught courses at UKC to students, clinicians and researchers, on clinical neuropsychology, experimental psychopathology, drug addiction and psychiatry, and publishing in international journals, where the teachers have been researchers and clinicians from Tuzla, from Norway and from the US. This competence building aspect to the enterprise should continue and be expanded, and I am keen to help Tuzla psychiatrists share their knowledge more with their international colleagues. How can they best share their experiences and ensure that the world and science learns from Tuzla's postwar life? The question for UKC is what its ambition in this field is. I say, aim high, and use the extensive clinical experience and burgeoning research experience with war psychiatry to make Tuzla a world centre in this research area.

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