

## the columns

## correspondence

## The brainstem and mental health tribunals in Scotland

In an elegant and important brain imaging study of response to threat, Mobbs et al (2007) demonstrated that increasing proximity of a virtual predator shifts human brain activation from the prefrontal cortex to the midbrain periaqueductal gray – the area responsible for active and passive defence responses (Bandler et al, 2000).

In a similar paradigm, Butler et al (2007) confirmed that feeling under threat, compared with feeling safe, is characterised by a shift from cortical to subcortical activation.

As there is a simultaneous reduction in activity in the areas associated with emotional autobiographical memory, such as hippocampus and precuneus, emotionally charged memories of dynamic motor sequences (McHaffie et al, 2005) may be more accessible to body-oriented approaches than to verbal episode-recall therapies (e.g. Ogden et al, 2006). When such pronounced effects are evident with virtual reality or laboratory paradigms, it is almost certain that they are much more active in situations of real threat, whether physical, social or professional.

At a recent mental health tribunal for Scotland hearing, I witnessed a patient's solicitor employing more and more threatening postural and verbal behaviours in response to the difficulties a social work colleague (mental health officer) was experiencing in keeping language and working-memory areas of the brain active in the face of the solicitor's ruthlessly adversarial approach. As would be predicted from the imaging studies, the increase in threat experienced during this savaging resulted in an even more reduced ability to access prefrontal functioning, with the result that the colleague's evidence was then easily and contemptuously dismissed ('with the greatest respect', of course, in the legalspeak for which clinical training provides no translation ability). Shame, the toxic and contagious emotion (Mollon, 1996) accompanying humiliated submission to predatory agonistic dominance (also a

periaqueductal gray-mediated function (Haller et al, 2006) neurobiologically incompatible with nurturing in the rat (Sukikara et al, 2006)) incorporates an urge towards social exclusion, which can be mirrored in the distancing of observers from the views of the victim. In other words, there is no need to wait for a decision based on points, if the contest has been decided by a knockout and a thrown towel: a victory for the judicial process.

It may be argued that those whose motivational drive switches from seeking or appetitive mode to fearful mode when the environment becomes hostile and the valence of the nucleus accumbens activation rapidly changes (Reynolds & Berridge, 2008) should leave the heat of their occupational kitchen. This in itself increases the threat status of the situation and makes it potentially more damaging in the long term for the mental health professional who, for reasons of professional pride, will find it impossible to see the situation as other than inescapable.

Although such a situation is nowhere near as traumatising as physical or sexual assault, the combination of an intense fear, a feeling of helplessness and an inability to escape are the features which characterise traumatic experiences, with the potential to cause long-term psychological damage (Bovin et al, 2008). Any previous experience of trauma-induced helplessness, from which mental health professionals are not immune, will compound the damage through triggering of body memories and intensification of the distress

From a neurobiological perspective, it is my contention that my colleague was being subjected to a traumatising experience with a potential for long-term damage.

Employers and professional bodies, including the Royal College of Psychiatrists, which facilitate such confrontations and condone the legislation which requires them, in contrast to the careful and respectful collection of data and information during cross-examination before a sheriff which happened under the old Act (1984), will presumably employ the nucleus accumbens/kitchen exit argument.

However, mental health professionals who are not trained as lawyers and are therefore bound to be losers in any such agonistic encounter may in due course be able to claim before tribunals of the employment variety that they are being subjected to unnecessary traumatisation by their employers.

What was the outcome of the tribunal hearing? There was a stunningly ingenious display of an ability to turn a straightforward question requiring a clear answer into a fence-sitting compromise which is likely to require another series of hearings within a few months. This is probably bad news for the patient, as this tribunal intimated that long-term detention would be appropriate but, of course, hearings are very convener-specific and unpredictable, so the hopes of the patient may not be being raised only to be dashed. It is certainly bad news for the mental health staff that will be exposed again to unnecessary vilification, by people who have no clinical experience or understanding of the complexities of a duty of care, to the detriment of the therapeutic relationship with the patient. However, to end on a happier note, it is great news for the lawyers in this tribunal industry which has a remarkable capacity for maximising the number of hearings that is required.

BANDLER, R., KEAY, K. A., FLOYD, N., et al (2000) Central circuits mediating patterned autonomic activity during active vs. passive emotional coping. Brain Research Bulletin. **53**, 95–104.

BOVIN, M. J., JAGER-HYMAN, S., GOLD, S. D., et al (2008) Tonic immobility mediates the influence of peritraumatic fear and perceived inescapability on posttraumatic stress symptom severity among sexual assault survivors. *Journal of Traumatic Stress*, **21**, 402–409

BUTLER,T., PAN, H., TUESCHER, O., et al (2007) Human fear-related motor neurocircuitry. *Neuroscience*, **150**, 1–7.

HALLER, J., TÓTH, M., HALASZ, J., et al (2006) Patterns of violent aggression-induced brain c-fos expression in male mice selected for aggressiveness. Physiology and Behavior, 88, 173–182.

McHAFFIE, J. G., STANFORD, T. R., STEIN, B. E., et al (2005) Subcortical loops through the basal ganglia. *Trends in Neurosciences*, **28**, 401–407.

MOBBS, D., PETROVIC, P., MARCHANT, J. L., et al (2007) When fear is near: threat imminence elicits prefrontal-periaqueductal gray shifts in humans. Science, **317**, 1079–1083.

MOLLON, P. (1996) Multiple Selves, Multiple Voices: Working with Trauma, Violation, and Dissociation. John Wiley.

OGDEN, P., MINTON, K. & PAIN, C. (2006) Trauma and the Body: A Sensorimotor Approach to Psychotherapy. Norton.

REYNOLDS, S. M. & BERRIDGE, K. C. (2008) Emotional environments retune the valence of appetitive versus fearful functions in nucleus accumbens. *Nature Neuroscience*, **11**, 423–425.

SUKIKARA, M. H., MOTA-ORTIZ, S. R., BALDO, M. V., et al (2006) A role for the periaqueductal gray in switching adaptive behavioural responses. *Journal of Neuroscience*, **26**, 2583 – 2589.

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## Problems with problembased learning in psychiatry

Problem-based learning was incorporated into many medical schools across Europe motivated by the belief that it would improve medical students'

problem-solving skills (Norman & Schmidt, 2000). Knowledge in psychiatry changes rapidly and by the time the students graduate, many are already behind in the latest developments. Thus the primary goal of problem-based learning is to prepare students to be lifelong learners and practical problem-solvers.

In problem-based learning, learning takes place in the context of cases. But whose gaze has divined these problems and produced the cases? We create problems based on our own experiences, usually shaped by traditional learning (lack of prepared materials is another problem). So then how do pre-shaped psychiatric problems help medical students learn to frame experience for themselves?

Another potential problem with problem-based learning is its relative inefficiency; some research suggests that problem-based learning curricula cover about 80% of what might be accomplished in a traditional curriculum in the same period (Albanese & Mitchell, 1993).

Problem-based learning assumes that students already are good problemsolvers, whereas it may be a skill they need to develop or improve. Simply asking students to work in groups does not necessarily develop good group-working skills. Further, some students are less capable (or less keen) to be actively involved in the learning activities, which affects the whole collaborative effort. And finally, in problem-based learning students may be deprived access to a particularly inspirational or charismatic professor who could attract young people to psychiatry and who in a traditional curriculum would deliver lectures to a large group.

ALBANESE, M. A. & MITCHELL, S. (1993) Problembased learning: a review of literature on its outcomes and implementation issues. *Academic Medicine*, **68**, 52–81

NORMAN, G. R. & SCHMIDT, H. G. (2000) Effectiveness of problem-based learning curricula: theory, practice and paper darts. *Medical Education*, **34**, 721–728.

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