

terms of personality configuration (because of lack of stability over time) and state determination (because variability over time is not treated as a source of error) (Gleser, 1975). Also the measurement of irritability is hindered by difficulties in discriminating its trait and state dimensions. Results may largely depend on the type of inventory employed. Readily available indications come from the relationship of hostility and irritability to depression, reviewed in detail elsewhere (Fava *et al*, 1982; Fava *et al*, in press). Although the evidence as to a direct correlation between hostility and depressed mood is conflicting—and also Snaith and Taylor observed a lack of correlation—several reliable studies suggest that hostility in depressed patients decreases with improvement in mood disturbances. Interestingly, in a study (Fava *et al*, 1982) that was performed in Italy, it was found that depressives displayed more hostility yet not less friendliness than a normal control group. These data were replicated in a more recent work in the United States (Fava *et al*, in press), where hostility decreased in melancholic patients after treatment with amitriptyline to such an extent that—upon recovery—there were no significant differences between patients and controls, whereas such differences were striking during the illness. In both studies the results were obtained by using the hostility and friendliness scales of the Symptom Questionnaire (SQ), a self-rating scale of psychological distress (Kellner, in press). The hostility-irritability scale is based on factor analyses and consists of 17 items such as “angry”, “feeling of hate” and “hostile”, and the six item scale for friendliness was constructed from antonyms with items such as “feeling friendly” or “feeling kind to people”. In several published studies the SQ was found to fulfil the psychometric requirements for a pure state or distress measurement: the hostility scale significantly decreases upon pharmacological treatment and not with placebo or upon completion of prenatal diagnostic procedures, and discriminates between patients and controls (Kellner, in press). Its test-retest correlation in normals is very high ( $r=0.93$ ) (Fava *et al*, in press), indicating a high consistency of response in subjects whose state remains unchanged.

Each individual may have his own irritability threshold. Anger and hostility may be a personality trait, as discussed by Snaith and Taylor. In some cases, however, affective disturbances such as depression may lower this threshold and irritable mood may ensue. Behavioural scientists ought to be aware of the psychometric distinction between state and trait and of the limitations of their psychologi-

cal instruments when studying the clinical aspects of irritability and hostility.

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#### Plasma Amino Acids, Downs Syndrome and Dementia

DEAR SIR,

Patients suffering from senile dementia (Alzheimer's disease), have been shown to exhibit a reduction in the ratios of both tryptophan and tyrosine to the sums of the larger neutral amino acids (Shaw *et al*, 1982) competing with them for transport across the blood brain barrier (Lajtha, 1974). This is likely to alter the relative amounts of these amino acids supplied to brain tissue, and thus to change the pattern of synthesis of proteins in the central nervous system.

Identification of patients undergoing the changes of early dementia of Alzheimer type is an uncertain exercise, and instead of this we have studied the nutritional status of individuals with Downs syndrome, a condition which is almost invariably associated with the pathological changes of Alzheimers disease (Burger & Vogel, 1973) if sometimes not the cognitive deficits (Hewitt *et al*, 1985).

There were significant differences between the plasma amino acid patterns of a group of 19 patients with Downs syndrome compared with an age and sex matched group of individuals with subnormality from other causes. Most of the latter had had brain damage at birth, and any with inborn errors of metabolism or who were receiving anticonvulsant drugs were excluded.

The findings in Down's syndrome included significantly higher plasma concentrations of cystine ( $1.6 \pm 0.2$  v  $0.8 \pm 0.2$ , mean  $\pm$  S.E.M.,  $\mu\text{Mol.L}^{-1}$ ,  $P < 0.002$ ), leucine ( $125 \pm 4$  v  $112 \pm 4$ ,  $P < 0.02$ ), phenylalanine ( $56 \pm 2$  v  $51 \pm 2$ ,  $P < 0.05$ ) and isoleucine ( $71 \pm 2$  v  $64 \pm 2$ ,  $P < 0.05$ ) and the ratios of leucine, of phenylalanine and of isoleucine to the

sum of the 11 other large neutral amino acids also were raised ( $P < 0.02$ ,  $< 0.001$  and  $< 0.001$  respectively).

In view of the mode of entry of amino acids into the brain, these data point to a possible source of abnormality in the central nervous system in young adults with Downs syndrome in terms of availability of substrate for protein synthesis.

It is suggested that this aspect of metabolism may merit further investigation both in Downs syndrome and in senile dementia itself.

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#### Mental Health Act and Medical Treatment Without Consent

DEAR SIR,

I thought your readers may be interested in an aspect of the new Mental Health Act which appears extremely illogical.

I have currently on my ward a lady suffering from a severe chronic intractable depression with extreme retardation so that communication with her is impossible. Because of her inability to give valid

consent I have already had to have three second opinions from the Mental Health Commission. At the time of the renewal of her Section I was informed by the Commission that if I wished to use any further treatment I would have to get yet a further fourth second opinion. A few days ago this lady appeared to be in pain and appeared to hold her leg in an abnormal posture. Her hip was x-rayed and this revealed a fracture of the acetabulum. My orthopaedic colleagues informed me that operative intervention was unnecessary and that she needed to be treated with analgesia alone as she did appear to be in such discomfort. As this lady was unable to give valid consent and as analgesia could not be constituted as a life saving procedure, I contacted the Commission to provide a second opinion to allow me to prescribe it. I was informed by the Commission that for medical treatment such as this I did not require their opinion even though valid consent could not be obtained. I was told that if in my clinical judgement as a doctor analgesia was necessary then I could prescribe it.

It seems strange to me that I am allowed to make clinical judgements about my patients in non-psychiatric areas and prescribe medication for them, but I am not allowed to do this in the one field I would consider myself to have some expertise in, namely the management of her depression. Also I wonder if I would be allowed to use antidepressants in this patient without a second opinion, on the basis that there is now considerable evidence that antidepressants have an analgesic effect!

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#### Transcultural Psychiatry

DEAR SIR,

I am delighted that Dr de Pauw (*Journal*, November 1985, **147**, 585-586) thinks I am passionate. Passionate or not, however, I am not responsible for the vagaries of the *Comprehensive Textbook of Psychiatry* (although if it says two different things in two different places that seems rather comprehensive).

The issue appears to be this: what reliance can be placed on the reports of colonial psychiatrists as to the actual occurrence of certain traditional behaviours variously termed the "culture-bound syndromes"? I am not entirely clear about de Pauw's point: the argument for *windigo* is in dispute,