

3. 'that occipital alpha and personality traits may predict one another'.

There are a number of issues relating to the experiment which cast doubt on whether these conclusions can be drawn from the data:

1. Rigorous test of Eysenck's theory of personality requires strategies other than basal EEG measurement, e.g., task performance paradigms (Gale 1973, 1974).
2. The subjects were all young, either university students or staff, and were paid for participating. This introduces bias (Orne 1962, Rosenthal, 1965), and Gale (1973, p 235) comments that such samples 'do not allow for the formulation of general statements concerning extraversion and the EEG'.
3. During the experiment, subjects were asked to 'close their eyes, sit back and relax'. Gale (1973, p 238) shows that such non-specific instructions 'constitute a major source of error variance'.
4. EEG data were analysed separately with regard to the two personality measures, i.e. no account was taken of interaction between them. Either a quadrant analysis or a comparison of high and low E scorers with N held constant (and vice-versa) would have been more appropriate.
5. Comparison of extreme groups does not allow the conclusion that 'alpha and personality traits predict one another': for this, correlational analysis is required.
6. The authors state that 'both scales of the EPI can be *reliably* related to occipital alpha' (my italics). 'Reliable' presumably means 'capable of replication': there are in the literature five studies which claim to demonstrate no relationship between extraversion and alpha activity, and five which claim to demonstrate a relationship opposite to that claimed by the present authors. These studies are reviewed by Gale (1973), who points out that the relationship between personality and EEG is not immutable, but depends to a large extent on experimental conditions.

Also, in the present experiment, the authors found no relationship between N scores and alpha activity, in contrast to their previous finding (Travis *et al.*, 1974). This earlier result cannot therefore be taken to show that N is *reliably* related to alpha activity, as the finding is not presently replicated. Apart from this, the results of the two experiments are not strictly comparable, as eyes-closed integrated alpha was measured in the present study, and eyes-open alpha index in the earlier.

Gale (1973, p 247, *et seq.*) has suggested methodological criteria for future study of the relationship between extraversion and the EEG. It may be that consideration of these recommendations would lead to more rigorous testing of hypotheses relating to EEG and personality.

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References

- GALE, A. (1973) The psychophysiology of individual differences: studies of extraversion and the EEG. Chapter 8 in Kline, P. (ed.), *New Approaches in Psychological Measurement*, 211-55. London: Wiley.
- (1974) EEG studies of extraversion-intraversion: sources of experimental error. Paper presented at the International Conference on *Temperament and Personality*, Warsaw, October 1974.
- ORNE, M. T. (1962) On the social psychology of the psychological experiment, with particular reference to demand characteristics and their implications. *American Psychologist*, 17, 776-83.
- ROSENTHAL, R. (1965) The volunteer subject. *Human Relations*, 18, 389-406.
- TRAVIS, T. A., KONDO, C. Y. & KNOTT, J. R. (1974) Personality variables and alpha enhancement. *British Journal of Psychiatry*, 119, 667-70.

CIMETIDINE AND PSYCHIATRIC COMPLICATIONS

DEAR SIR,

Cimetidine, the histamine H₂ receptor blocking agent, is now widely used in medical practice for the treatment of peptic ulceration. Organic psychoses have occasionally been reported to occur with this treatment, particularly in the elderly (McMillen *et al.*, 1978). The manufacturers of cimetidine have also been informed of a single case of an anxiety-depressive syndrome due to cimetidine, which completely remitted after the drug was discontinued. We have recently met a similar case, which we feel is worth reporting, in order to draw attention to this possible complication of cimetidine therapy.

A 37-year-old married woman developed acute dyspepsia and anaemia. She was found to have malaena and a duodenal ulcer was demonstrated radiologically. After blood transfusion and treatment with cimetidine, 200 mgs t.d.s. and 400 mgs nocte, all her symptoms disappeared. Three weeks after beginning treatment with cimetidine, she developed acute panic attacks, palpitations and dizziness. These occurred spontaneously and she refused to be left alone or to leave the house. After some weeks, a

persistent diurnal depressive mood state developed, and she was admitted to a psychiatric hospital. No physical or psychological explanation of her symptoms could be discovered, and she had no previous psychiatric history. By this time she had continued to take this same dose of cimetidine for six months. Reduction of cimetidine to 200 mgs b.d. produced some improvement in her symptoms, and two weeks after total discontinuation of cimetidine, all her psychiatric symptoms had completely disappeared and have not recurred.

Anxiety-depressive syndromes as a complication of cimetidine therapy are clearly of importance to the psychiatrist, particularly as the frequency of their occurrence is as yet unknown. This complication may also have relevance to recent studies of the biological basis of endogenous depression, where disturbances of histaminergic neurones have been thought to be aetiological. (Leader, *Lancet*, April 15, 1978).

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Reference

- McMILLEN, M. A., AMBIS, D. & SIEGEL, J. H. (1978) Cimetidine and mental confusion. *New England Journal of Medicine*, **298**, 284.

NECROPHILIA, MURDER AND HIGH INTELLIGENCE

DEAR SIR,

The case report concerning 'Necrophilia, Murder and High Intelligence' by N. P. Lancaster (*Journal*, June 1978, **132**, 605-8) is of great interest. Not the least aspect of interest is the comment that 'He disliked dead bodies and whilst nursing was stated to have tried to get others to lay out the dead. He had eventually left nursing because of his dislike of nursing old people'. This in a man who 'Apart from the murder and the two mortuary incidents (involving female corpses), (he) was not sexually perverted'.

Clearly the patient/prisoner has gross sexual psychopathology and this we suggest is indicated by his nursing history. In an article we have published, 'Homosexual Necrophilia' (Bartholomew *et al.*, 1978) we quote from a review of the literature by Bierman (1962). In this review he states: 'Glauber (1953) showed how necrophilic fantasies may act as a deterrent to the study of medicine. Pomer (1959) demonstrated how necrophilic fantasies similarly contributed to a work inhibition in a pathologist'. The article by Pomer is entitled 'On Necrophilic Fantasies

and Choice of Specialty in Medicine'. This raises some interesting speculations not only in terms of the whole of medicine but in the smaller field of psychiatric medicine. For example, do the four groups of psychiatric consultants delineated by Hafner, Lieberman and Crisp (1977) have significantly different (sexual) psychopathology which significantly determines the area of sub-specialization, e.g., geriatric or child psychiatry, and the therapeutic techniques practised, e.g., electro-convulsive or psychotherapy.

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References

- BARTHOLOMEW, A. A., MILTE, K. L. & GALBALLY, F. (1978) Homosexual necrophilia. *Medicine, Science and Law*, **18**, 29-35.
- BIERMAN, J. S. (1962) Necrophilia in a thirteen-year-old boy. *Psychoanalytic Quarterly*, **31**, 329-40.
- GLAUBER, I. P. (1953) A deterrent in the study and practice of medicine. *Psychoanalytic Quarterly*, **22**, 381-412.
- HAFNER, R. J., LIEBERMAN, S. & CRISP, A. H. (1977) A survey of consultant psychiatrists' attitudes to their work, with particular reference to psychotherapy. *British Journal of Psychiatry*, **131**, 415-19.
- POMER, S. L. (1959) On necrophilic fantasies and choice of specialty in medicine. (Abstract). *Bulletin of the Philadelphia Association of Psychoanalysis*, **9**, 54-5.

DEAR SIR,

It appears that the outcome of Dr Lancaster's case (*Journal*, June 1978, **132**, 605-8) has satisfied neither him nor subsequent correspondents. Judging by his paper, a plea of diminished responsibility on the grounds of psychopathic disorder would be unacceptable to Dr Lancaster, and that his case had suffered from a confusional state or non-insane automatism was unacceptable to the prosecution psychiatrists (and the jury). Manslaughter on the grounds that the accused was unable to form intent might or might not have been successful, yet it must be remembered that unlike Beard or Dr Pierce James' example (*Journal*, January 1979, **134**, 125), Dr Lancaster's case remembered not only what he had done but also being aware of doing it at the time.

His description would probably be given the diagnosis of pathological intoxication by the early authors described by Banay (1944), which encompasses the symptoms Dr Fullerton (*Journal*, October