HAND AND EYE DOMINANCE IN SCHIZOPHRENIA

DEAR SIR,

Oddy and Lobstein (*Journal*, March 1972, **120**, 331) apparently assume that in a normal population hand and eye dominance are related, whereas it has been shown that they are not (e.g. Merrell, 1957; White, 1969; Gronwall and Sampson, 1971). Under normal viewing conditions, both eyes project to both cerebral hemispheres simultaneously, and which eye is dominant is determined not by cerebral but by ocular factors, such as (but not exclusively) visual acuity.

Oddy and Lobstein do not state if any steps were taken to determine whether the eyes of their subjects were equally good. In my studies, 180 patients and 76 members of staff from two hospitals completed a questionnaire about handedness and eye dominance (Annett, 1970). All were asked if their eyes were equally 'good' or if one was weaker than the other; 93 (51·7 per cent) of the patients and 39 (51·3 per cent) of the staff replied that one eye was weaker. The 'weaker' eye was the same one as the non-dominant eye in 81 patients (87·1 per cent of the group with unequal eyes) and 39 staff (76·9 per cent). These data demonstrate that differences in acuity cannot safely be ignored.

Merrell (1959) determined the handedness of his subjects, using only four criteria; Oddy and Lobstein use eleven separate actions, and any subject who used his non-preferred hand for any one of these actions was classed as mixed-handed. The two groups being compared are therefore not equivalent with respect to their handedness patterns. In fact, Oddy and Lobstein's two groups of patients have a binomial distribution of handedness patterns (Annett, 1967), whereas Merrell's group's preferences are significantly different from the binomial distribution ($\chi^2 = 18{\cdot}41$, d.f. $= 2$, $p < 0{\cdot}001$).

Of the 76 staff members who completed Annett's questionnaire, 12 did not use the same hand for all actions, so were classed as mixed-handers. When only Merrell's four criteria were considered, 6 of these subjects were reclassified as right-handed and one as left-handed, with only five mixed-hangers remaining.

Furthermore, it appears from Table I of Oddy and Lobstein that there were not sufficient numbers of subjects in enough of the cells to make chi-square a legitimate measure of significance.

There is clinical and circumstantial evidence for the hypothesis that laterality is disturbed in schizophrenia, but proof of this can be obtained only from studies of factors which correlate highly with cerebral dominance, which ocular dominance does not.

ELIZABETH A. CLYMA,
John Stokes Research Fellow.
University Department of Psychiatry,
Whiteley Wood Clinic,
Woofinden Road,
Sheffield, S10 3TL.

REFERENCES

ANNETT, M. (1967). 'The binomial distribution of right, left and mixed handedness.' *Quart. J. exp. Psychol.*, **19**, 327–33.

—— (1970). 'A classification of hand preference by association analysis.' *Brit. J. Psychol.*, **61**, 303–21.

GRONWALL, D. M., and SAMPSON, H. (1971). 'Ocular dominance: a test of two hypotheses.' *Brit. J. Psychol.*, **62**, 175–85.

MERRELL, D. J. (1957). 'Dominance in eye and hand.' *Human Biology*, **29**, 314–28.

WHITE, M. J. (1969). 'Laterality differences in perception: some structural factors.' *Psychol. Bull.*, **72**, 396–402.

ORGANIC OR PSYCHOGENIC STUPOR

DEAR SIR,

I refer to the letter by Dr. J. P. Crawford in the May 1972 *Journal* (**120**, p. 592).

I agree with his emphasis on the fact that akinetic mutism may be of organic origin and on the possible relationship with the brain-stem reticular formation. This relationship was borne out by a case which I reported in some detail (1) in which persistent, intractable and deepening organic stupor following a severe head injury responded to a course of ECT and this response was consistently maintained during a period of follow-up covering $5\frac{1}{2}$ years.

MAURICE SILVERMAN.
Department of Psychological Medicine,
Queen's Park Hospital,
Blackburn,
Lancs., BB2 3HH.

REFERENCE

1. SILVERMAN, M. (1964). 'Organic stupor subsequent to a severe head injury treated with ECT.' *Brit. J. Psychiat.*, **110**, 648.

KLINEFELTER'S SYNDROME, 47,XXY

DEAR SIR,

I should like to inform Dr. Jacob Kahn that his objection to the monograph *A Psychological-Psychiatric Study of Patients with Klinefelter's Syndrome* by A. Theilgaard *et al.* (reviewed by him in the July 1972 issue, p. 110) regarding the 'doubtful value of

statistical tests . . . since the population samples studies are not homogeneous with regard to distributions of age or IQ', does not hold. There is hardly any difference in age distribution: Mean and S.D. $27 \cdot 15 \pm 9 \cdot 59$ vs. $27 \cdot 63 \pm 6 \cdot 00$. The difference in IQ's of the experimental and control groups was precisely one of the findings of the study, a fact which indeed is of interest, since the difference of the distribution of educational level and occupation of brothers and fathers between the two groups was to the advantage of the patients with 47,XXY and not to the patients of 46,XY.

Finally, it should be mentioned that to secure an unbiased attitude on the part of the examiner the psychological investigation was carried out blindly, the psychologist possessing knowledge of neither anamnestic data, psychiatric evaluation, or results of physical and cytogenetic examinations.

ALICE THEILGAARD.

Psykiatrisk Klinik,
Rigshospitalet,
Blegdamsvej 9,
Copenhagen, Ø, Denmark.

PEMOLINE IN OVERACTIVE MENTALLY HANDICAPPED CHILDREN

DEAR SIR,

Amphetamine has been described as a useful drug for the treatment of overactivity in mentally handicapped children.

Response has been demonstrated in children suffering from behaviour problems associated with an abnormal EEG, certain types of epilepsy and in some aggressive psychopaths. A panel appointed by an American Department of Health, Education and Welfare reached the conclusion that no dangers exist for children if amphetamine treatment is properly applied and therefore gave it their seal of approval in the treatment of hyperkinetic children (American letter, *British Journal of Hospital Medicine*, August 1971).

Spencer (*British Journal of Psychiatry*, August 1970) reporting the results of a double blind trial with pemoline (Ronyl) concluded that it may be of value in the treatment of overactive mentally subnormal children. I therefore made the following trial.

Nine overactive, severely subnormal children, aged between 12–16 years were given a trial dose of pemoline 20 mgs. t.d.s.; their previous medication (usually anticonvulsant and/or major tranquillizer) continued unchanged during the trial. The patients' response was assessed at weekly intervals based mainly on clinical observations: Hyperactivity, Aggressiveness, Destructiveness, and Antisocial activities.

The result was that four of the children, during the first week of the trial, showed a marked deterioration in all aspects of their behaviour so that pemoline had to be discontinued during the second week and they soon reverted to their previous behaviour pattern; of the remaining five children, after eight weeks of treatment, two showed no response, two improved with prominent reduction of overactivity, and one showed remarkable improvement in all aspects.

The result of this study, despite the small number involved and the disadvantages of having as criterion clinical observations only, seems to show that pemoline may be a drug of valuable assistance in the treatment of some overactive, destructive, mentally subnormal children.

Acknowledgements are due to the Nursing Staff at St. Margaret's Hospital, Birmingham, for their valuable assistance.

M. TRIANTAFILLOU.

St. Margaret's Hospital,
Great Barr,
Birmingham, B43 7EZ.

MEDICAL PRACTICE

DEAR SIR,

The figures of patient turnover given recently for a general medical unit of 60 beds under two whole-time consultants (1), are of interest to compare with those of the psychiatric 'firm' serving the statistically typical population of the Parliamentary constituency of Gravesend and North Kent (about 100,000 people). This 'firm' has one whole-time consultant and about 25 admission beds (there being no rigid allocation). Like the medical unit, the psychiatric 'firm' runs four weekly out-patient clinic sessions, but also a day hospital and a longer-stay in-patient commitment now mostly unrelated to its present catchment area.

TABLE

Annual average numbers of patients per whole-time consultant over a three-year period

	Gravesend psychiatric 'firm' (1969–72)	'Uxbridge' medical unit (1968–70)
Admissions . .	245	704
Rate per bed . .	10	24
New out-patients . .	431	523
Reattendances . .	1,623	2,270