readers that W. I. Gardner's important book *Behavior Modification in Mental Retardation*, reviewed by Dr. Wollen in the April *Journal* (vol. **120**, p. 466), has now been published by London University Press. It costs £5.60.

It believe that Dr. Gardner's book is a most important contribution to the care of the mentally retarded, for the following reasons:

(i) It explains most lucidly and concisely the principles of behaviour analysis and modification by operant conditioning.

(ii) It describes briefly but clearly the essential components of this approach to the care of the retarded:

(a) The need to specify with great precision the behaviours that might usefully be reduced in frequency or intensity because they are disruptive or aversive to others, and the useful or appropriate behaviours which might at the same time be increased in frequency.

(b) The need to assess the effectiveness of any programme to modify behaviours by measuring very systematically whether or not the programme is followed by changes in frequency of the target behaviours—such changes may be missed in the absence of frequency counts.

(c) The need, when programmes prove ineffective, to re-examine and replan the programme. The approach is clearly inconsistent with the time-honoured practice of labelling patients, when programmes appear ineffective, as 'vegetative idiots', 'hyperactive imbeciles', 'gross homosexuals', or as persons 'who cannot benefit from training or education'.

(iii) It gives many clinical examples both of behaviour analysis and programmes of rehabilitation. These have been well chosen in that they occur commonly inside and outside of residential facilities for the retarded.

(iv) It includes information on all ranges of retardation including the most profoundly retarded and severely behaviour-disordered for whom so much exciting work waits to be undertaken.

(v) It can be used by parents, teachers, nurses, social workers, psychiatrists, as well as by psychologists.

(v) It is well annotated and the bibliography is a masterly collection of most of the best work done in this area up to the time of publication.

ALBERT KUSHLICK.
Director of Research in Mental Handicap,
Wessex Regional Hospital Board,
Highcroft,
Romsey Road,
Winchester, Hants.

A STUDY OF IMIPRAMINE IN THE TREATMENT OF PHOBIAS

DEAR SIR,

The recent correspondence from Freed and his co-workers (*Journal*, May 1972, p. 590–1) on the treatment of obsessional neurosis with tricyclic antidepressant drugs prompts me to publish my own experience in the treatment of phobic neurosis (I.C.D. 300.2) by this means. Impressed by the results of Kelly and his co-workers (1), and yet confused by the practice they had adopted of using mixtures of drugs in the treatment of their patients, I wished to gain some information of the effect of one drug alone in this condition.

Accordingly most of the patients presenting at my clinics whom I diagnosed as suffering from phobic neuroses were treated with imipramine alone for a period of at least eight weeks. During this period the dose was increased to the limit of tolerance, and at the final assessment interview 17 of the 33 patients were taking 225 mg./day; the rest of course were receiving a somewhat lower dose.

Initial and final ratings were made using Marks and Gelder's phobic rating scale (2), and in addition ratings were made of the intensity of associated free-floating anxiety and of depression on two similarly constructed five-point scales. (Various self-rating scales were also used, but since they added nothing to the information gained from the clinical ratings they will not be analysed here).

Fourteen of the patients suffered from agoraphobia, eight from social phobias and eleven from other phobias. The results, expressed as percentage falls in the ratings between the initial and the final interview at eight weeks, are shown in the accompanying Table.

	Anxiety	Depression	Phobia
Agoraphobia ..	19·0	30·1	33·3
Social ..	33·2	20·0	25·1
Others ..	42·3	39·4	33·3

So far as the phobic symptom alone is concerned a fall of three or four points on the phobic scale may be called a good response, a fall of two points a moderate response, and a fall of one point or no fall at all a poor response. Of the total population the proportion in these categories was 18·2 per cent, 27·3 per cent and 54·5 per cent, respectively.

Rank correlations of the degree of the improvement in the phobia ratings and the initial ratings of all three measures were carried out. This proved significant for the (initial) depression rating ($r + \cdot 41$; $p < \cdot 02$)

and not significant for the (initial) phobia (+ ·03) and anxiety (+ ·04) ratings.

Although I had according to my judgement excluded cases suffering primarily from depressive illness, it is possible that cases were included whom others might have regarded as 'pseudo-neurotic depressives'. At any rate it appears that most improvement in these cases might be expected in patients with associated depressive symptoms at their first presentation.

This result is in accordance with expectation, imipramine being an antidepressant drug. I could not detect in my clinical observations or in the statistical results any significant 'anti-anxiety' effect as claimed by Klein (3).

Certainly my results were not as good as those of Kelly *et al.*, and it may be that their treatment, composed of a combination of drugs of which MAOIs were the chief ingredient, carries significant advantages over imipramine. What is certainly required is that further controlled studies should be carried out in this field.

R. P. Snaith.

Stanley Royd Hospital,
Aberford Road,
Wakefield,
Yorkshire.

References

1. Kelly, D., Guirguis, W., Frommer, E., Mitchell-Heggs, N., and Sargant, W. (1970). 'Treatment of phobic states with anti-depressants.' *British Journal of Psychiatry*, **116**, 387–98.
2. Marks, I. M., and Gelder, M. G. (1965). 'A controlled retrospectic study of behaviour therapy in phobic patients.' *British Journal of Psychiatry*, **111**, 561–73.
3. Klein, D. F. (1964). 'Delineation of two drug-responsive anxiety syndromes.' *Psychopharmacologia*, **5**, 397–408.

CONSCIENCE AND DEPRESSIVE DISORDERS

Dear Sir,

I should like to make two comments upon the paper by Drs. Amdur and Harrow in the March 1972 issue of the *Journal* (**120**, pp. 259–64).

(1) It was demonstrated that patients with depressive illnesses have stricter consciences, according to the criteria used, than schizophrenic patients or subjects with personality disorders. It might possibly have been predicted that the latter two groups had laxer consciences than mentally healthy individuals, so that it has not been shown that subjects susceptible to depression have stricter consciences than do healthy subjects. The authors fail to comment upon the similarity of scores on the various scales recorded for depressed and 'other' patients (excluding schizophrenics and those with personality disorders). Those 'other' patients had various other diagnoses which were not specified, and the companion article 'Guilt and depressive disorders' in *Archives of General Psychiatry* does not clarify this matter. Surely a healthy control group is required before any conclusions can be drawn about the strictness or otherwise of the consciences of the depressed patients.

(2) Stricter conscience as measured by the authors is shown to be positively correlated with increasing age, and various possible explanations are considered. Could it be that the subjects gave responses socially acceptable to their own age group irrespective of the rigidity of their own consciences? Thus the younger patients might have replied in a vein in keeping with the morals of the 'permissive society', whereas the older patients might have responded in a manner suitable to a more authoritarian approach.

J. A. G. Watt.

Gartnavel Royal Hospital,
1055 Great Western Road,
Glasgow, G12 OAA.

THE FORMATION OF THE CLINICAL NEUROLOGY INFORMATION CENTER AT THE UNIVERSITY OF NEBRASKA

Dear Sir,

In March 1972, the Clinical Neurology Information Center (CNIC) was established at the University of Nebraska College of Medicine under the auspices of the National Institute of Neurological Diseases and Stroke. This is the third of a series of information centres in the NINDS Neurological Information Network; Brain Information Service is at UCLA and the Information Center for Hearing, Speech and Disorders of Human Communication is at Johns Hopkins.

The initial activities of CNIC will be the publication of State-of-the-Art papers; these will be critical reviews of topics of interest to neurologists, neurosurgeons and other clinical neuroscientists.

Information concerning CNIC may be obtained by addressing inquiries to: Director, Clinical Neurology Information Center, Medical Library, University of Nebraska College of Medicine, Omaha, Nebraska, 68105, U.S.A.

Walter J. Friedlander,
Director, CNIC.

University of Nebraska College of Medicine,
Omaha,
Nebraska 68105,
U.S.A.