

or few spare time interests, no participation in sports after leaving school, puberty appearing after the age of 15, immature, sensitive, insecure, especially insecure when interviewed about sexual problems, puberty behaviour, boastful and self-assertive behaviour, tense and restless, and passive and apathetic.'

The comparison between the two groups confirmed the findings of previous studies that patients with 47,XXY Klinefelter's syndrome were significantly different having lower intelligence, an increased risk of mental illness, and a higher frequency of criminality.

Fewer and less striking differences were found between the two groups with respect to physical observations, though the mean testis size was larger (though still below normal), and gynaecomastia a more prominent finding in the Klinefelter group. No differences were found between the groups in the urinary excretion of pituitary gonadotropin, 17-ketosteroids or androgenic hormone; nor were differences found between the groups with respect to treatment with testosterone choriongonadotrophin.

Although this study brings out with considerable clarity the psychiatric and psychological features concomitant with the 47,XXY genotype, yet as its authors admit it adds nothing to the understanding of the pathogenesis of these mental abnormalities. To elucidate this, they recommend psychiatric-psychological, neurophysiological, biochemical and endocrinological studies of unselected groups of hypogonadal males. It is a pity that further approaches along some of these lines were not made in the present study. Although there have been strong indications of cerebral dysthythmia in many studies of patients with various sex chromosome abnormalities, the extent to which this is found, and its specificity and significance, need further investigation. The authors of the monograph turn aside from an EEG study, however:

'Studies of a possible correlation between the mental abnormality in patients with 47,XXY and EEG abnormalities have been controversial, and there is no proof today of any such correlation except for the findings of a significantly higher frequency of low alpha frequencies . . . The significance of this finding is, however, not clear.'

The EEG is just one of many lines that might have been followed in this study with its very interesting case material. At this stage a more basic biological approach is called for; and despite the careful casework and psychometry, this monograph is somewhat disappointing and limited. We shall, however, look forward to further work from this centre.

VALERIE COWIE.

WHO RESEARCH STUDY GROUP

Discussions on Child Development. 4 volumes. Edited by J. M. TANNER and BÄRBEL INHELDER. Social Science Paperbacks, London: Tavistock Publications. 1958. Each vol. 12s.

These four volumes record yearly meetings of the Research Study Group on the Psychological Development of the Child convened by the World Health Organization.

Star performers amongst the regular members were Lorenz, Margaret Mead, Bowlby, Piaget, Grey Walter, and from the guests may be extracted Huxley, Erikson and Bertaflandy; so there could be no doubt that the standard was of the highest order. There were others, too, who, less well-known and with less need to expound, often proved better at communicating.

The aim of the study group was to limit papers to twenty minutes 'and to bring the discussion that ordinarily takes place in the corridor outside the scientific meetings into the meetings themselves'. It was partially successful, and the discussions were usually lively, stimulating and sometimes exciting, but some of the papers must have been delivered at an enormous speed if they were finished in twice the allotted twenty minutes.

Volume 4 is devoted to an attempt at a synthesis of the differing views. It was initiated by Piaget, whose paper and the comments by other members of the group were precirculated before the discussions of them began.

It would be quite hopeless within the space of this review, to detail the contents of these volumes, but any reader will probably pick out one contribution that interested him most. For my part it was Bertaflandy on general systems theory.

When hardback volumes are reprinted in paperback after many years it is pertinent to ask whether it has been worthwhile. When first published the 'Discussions' were hailed with a lather of praise and even though they have dated—for instance Bowlby had not published any of his work on the relation of psychoanalytic instinct theory and ethology—this will not matter to those who want to study the methodology of interdisciplinary discussion. As an exercise in collaboration the study group is probably without equal.

There are many usages to which these always brilliant volumes can and no doubt will be put. Though they are intended for the research-minded, students could use quite a number of the opening papers with profit and obtain better marks in their examinations from having done so!

MICHAEL FORDHAM.