

being also removed. Immediately thereafter sexual desire and power came to an abrupt end, and for eight years subsequently he never had a sexual dream. Full details are given of the physical and psychical eunuchism that gradually established itself, as well as of the definite changes of a neurosympathetic kind that were observed. It is of no little interest that after some time attacks apparently of a narcoleptic kind developed

On December 14, 1928, under anæsthesia, an ape's testis, divided into two, was imbedded under the skin of the abdomen, one piece on either side. One of these was accidentally injured and removed, but the other 'took.' Within about three weeks the patient began to lose some of his fat and his hair began to grow again; his abnormal sweating diminished and he became less sleepy. Two months after the operation he had a sexual dream. For the numerous details of the subsequent course of the case (observed for a period of three months), the original deserves perusal.

The conclusion is as follows: "There can be no doubt that as a result of the transplantation a factor was introduced into the body which acted permanently on the vegetative nervous system in the same way as hitherto extracts from the genital organs have acted temporarily, viz., by reduction of the increased vagotonus that followed the castration."

S. A. K. W.

## Psychopathology.

### PSYCHOLOGY.

[125] **A biochemical approach to the study of personality.**—GILBERT J. RICH.  
*Jour. Abnorm. Soc. Psychol.*, 1928, xxiii, 158.

BIOCHEMISTRY offers a fruitful means of studying personality, inasmuch as certain chemical determinations appear to be definitely correlated with personality traits.

Preliminary experimentation indicates tendencies for the following relationships to hold:

1. The least excitable individuals tend to have the most acid urine and saliva, while more excitable persons tend toward neutrality or alkalinity of their fluids.

2. The least aggressive subjects appear to excrete the greatest amounts of acid as measured by formol titration and to have the highest alkali reserve of the blood, while more aggressive persons seem to show opposite characteristics.

3. Emotional excitability tends to bear an inverse relationship to the presence of creatinine in the blood and its excretion in the urine.

4. Phosphorus metabolism appears to be bound up with personality in some way, but the details of the relationship are not yet clear.

J. S. P.

[126] **The relation of muscular tonus and the patellar reflex to mental work.**—

F. L. GOLLA and S. ANTONOVITCH. *Jour. Ment. Sci.*, 1929, lxxv, 234.

THOUGH an increase of tonus accompanying mental effort shows a corresponding general increase of the knee-jerk response, isolated knee-jerks may occur during the heightened phase which are not only much smaller than their neighbours, but may actually be much less than those occurring when the tonus is depressed during the resting period. An examination of simultaneous records of the knee-jerk of one limb and the tonic response of the other shows no correlation between the spontaneous variations of knee-jerk and of tonus when the subject is at rest. We may therefore distinguish increases and decreases of knee-jerk depending on mental effort and affective stimuli which are accompanied by parallel variations of tonus; and on the other hand, random individual fluctuations of the knee-jerk not dependent on cerebral activity and not accompanied by any corresponding changes of tonus. There is a large body of evidence which tends to support the view that increased muscular tension improves mental efficiency. It will be found that all this evidence deals entirely with voluntary innervation, and has in itself no direct bearing on the problem of the increases of tonus here dealt with. The authors' experiments lend no support to any attempt to co-ordinate attention with muscular mechanisms. The rise of tonus occurring at the inception of work appears to be of the nature of a preparatory reaction which might fitly be compared with some of the bodily concomitants of emotional states. It is found that the rise of an emotional state is accompanied by certain bodily reactions which do not persist throughout the continuance of the emotion. These reactions are probably an atavistic phenomenon, representing the preparation of the organism for continued bodily activity, the necessity for which no longer exists under modern conditions. Such movements as actually accompany mental processes are of a more purposive type, and belong to another and more recent mechanism than that concerned with emotion or effort.

C. S. R.

[127] **Psychological effects of long spells of repetitive work.**—K. G. POLLOCK.

*Brit. Jour. Psychol.*, 1929, xx, 43.

THE following general but tentative conclusions were come to. In all periods of one hour and upwards accuracy tended to decrease in the second as compared with the first half of the spells of work, the relative decrease in accuracy apparently increasing in spells of above one hour, but thereafter remaining fairly constant up to spells of eight hours. There appeared to be a small involuntary increase of rate of work during the second as compared with the first halves of the spells irrespective of their length. In general, accuracy improved slightly after prescribed pauses, more or less irrespective of their length, and seemed to decrease slightly after unexpected pauses enforced by

some disturbing external circumstance. Feelings of tiredness were almost consistently accompanied by a fall in accuracy but by practically no change in the rate of work. Whenever such fluctuating attitudes as cheerfulness and confidence were recorded they seem to mark a period of increased accuracy. Singing invariably appeared to improve accuracy and slightly to decrease rate of work. General drowsiness seemed to produce a slight fall of accuracy and a slight increase of rate. Outside distractions (produced by external continuous noises) seemed slightly to increase accuracy and decrease rate of work. Momentary distractions, such as the coming of individuals into the experimental room, increased accuracy more but had little effect on the rate of work.

C. S. R.

[128] **Results from some new tests of practical abilities.**—W. VICKERS and V. H. HOSKIN. *Brit. Jour. Psychol.*, 1929, xx, 66.

TESTS of practical abilities have been devised giving consistent results. Practical ability increases up to the age of 25 to 30 and then decreases, whereas practical skill (at least in file-cutting and machine tool-making) increases progressively up to 50 years of age. Intellectual ability, when tested in a practical situation, also increases to a maximum at 25 years and then decreases. Age is thus shown to act as an interference factor. The women scored less than the men in all the tests.

C. S. R.

[129] **Some notes on the attitude of children to dress.**—EVE MACAULAY. *Brit. Jour. Med. Psychol.*, 1929, ix, 150.

CHILDREN up to about the age of nine look upon clothing simply as being decorative, and would probably, if free to choose, wear anything as long as the colour is sufficiently brilliant. Clothing has little, if any, significance for the self and is not considered when the claims of the body for physical enjoyment are to the fore. From the tenth to the twelfth year the desire for decoration increases, and some slight attention is given to the actual design and cut as well as to the colour. The edicts of convention also oppress the child during this period, and there is some conflict between the desire of the body for unrestricted enjoyment and the necessity for caring for and considering the clothes. During adolescence begins the sublimation of interest from the body to the clothes, probably accompanied, on the part of girls, with a certain amount of consciousness of sex. The motive of modesty is strongly considered in connection with clothes so far as the females in the lower sections of society are concerned. Those at the bottom of the social scale have been unwilling to accept the now widely held opinion that a lightly veiled body is not necessarily and deliberately immodest. Probably the unconscious impulse, up to the ninth or tenth year, is in favour of nakedness.

C. S. R.