50 to 200 per cent. above that of the control period. In four other cases the progress of the disease appeared arrested. No clinical improvement resulted in 13 patients, nine of whom were suffering from neuromuscular conditions in which increased creatinuria was absent or less than 50 per cent. above that of the control period. The result of these studies confirms the authors’ view that both creatin and creatinin may have an exogenous origin from the amino-acids of the diet. Glycine therapy had little effect upon the distribution of nitrogen in the urine of three cases in the form of the total urea, ammonia, uric acid and undetermined nitrogen. The increase in creatin and creatinin excretion was affected in only one of these cases. Some evidence is presented that the lower motor neurone with the muscle it innervates must be functionally intact for creatin formation from amino-acids.

C. W. D.

**Psychopathology**

**PSYCHOLOGY**

[162] The colour preferences of 1,032 young children.—**THOMAS R. GARTH** and **ELECTA PENINA PORTER. Amer. Jour. Psychol., 1934, 46, 448.**

Older children were found to have a more definite discrimination of feeling of difference between colours than younger children. This discrimination tends to increase with age. The boys on the whole show this more than girls. Even children of a very young age like any colour better than white. Yellow tended to be the least esteemed of the colours, and red was thought highly of by all age-groups. On the whole blue tended to be more esteemed with increasing age, and the divergence between it and yellow tends also to increase with age. There is a tendency for the ratios between the 'pulls' of red and green, and of orange and violet, to decrease with age.

C. S. R.

[163] The rôles of the situation and adrenalin in the induction of emotion.—**HADLEY CANTRIL. Amer. Jour. Psychol., 1934, 46, 568.**

In the author’s experiments an analysis of the emotional experiences aroused shows that there is a different pattern of affective dimensions for fear and disgust. The variations noted between the organic-kinæsthetic disturbances concomitant with fear and disgust suggest that the physiology of different types of emotions should be made more explicit if the rôle of the autonomic nervous system in the development of emotions is to be known. The adrenalin syndrome is more typical of the bodily reactions in fear than in disgust. The sensory concomitants of the emotional experience are secondary to the experience conceptualized as a whole. The awareness of some object or
situation around which the emotion is intellectually organized is the immediate cause of the emotional experiences as reported by the observers. It is suggested that the 'usual emotional state' involves a primary autonomic reaction and an intellectual content. The genuine emotions elicited by the injection of adrenalin in the experiments of others may be due to the fact that the autonomic reactions themselves were conceptualized by the observers as emotional situations. It is thought also that the quality of an emotion is primarily dependent upon the attitude aroused in the observer by the stimulus. It may be implied from the introspections that the observer's attitude is partially due to his experiential background. Again this attitude may be somewhat determined by characteristics of temperament.

C. S. R.


A developmental history and a report of the physical and psychological examination of two girls of 10 years of age who are identical twins are given. It is pointed out that seldom in the study of human beings can we attain such a satisfactory control as by the observation of one twin as subject and an identical twin as control. It is the writer's belief that brain injury at birth is a much more common occurrence than usually realized and that careful study will reveal some indication that many children who are characterized as nervous, hyperactive, fidgety, dull, or clumsy, are so by reason of organic brain damage of mild degree, occurring either at birth or during an infectious period in infancy. It is also thought that twins, in particular identical twins, may present their own special problems of adjustment by reason of being twins. Probably being one of twins has its special compensations and advantages but if for any reason one of the twins gains ascendancy over the other the unfavourable comparison between them may be damaging to the less successful. It would seem to be particularly damaging with identical twins.

C. S. R.


This study was made from 33 children who were selected on the basis of a definite statement by the mother that the birth of the child was unwelcome to her. It shows that maternal rejection is primarily due to the mother's unhappy adjustment to marriage. This in turn is usually a result of immaturity and emotional instability on the part of one or both parents. These mothers express their rejection by undisguised forms of neglect and cruelty,
by overprotection as a reaction to feelings of guilt, or by an inconsistency in handling. Feeling more insecure than the average child, such children are impelled by the necessity of extracting from their parents and other adults expressions of being welcome or important. Thus they are peculiarly sensitive to attention. They derive a certain satisfaction from having their mothers upset about them, and much of their specific behaviour represents a discovery on their part of what their mothers fear the most. The conclusion is that maternal rejection is an important factor underlying the insecurity which often accompanies the clinical picture of emotional instability.

C. S. R.

PSYCHOSES


In 24 normal male subjects and in 72 schizophrenics free from detectable organic disease, the reaction of blood-pressure and pulse-rate to the intravenous injection of 0.05 mg. of epinephrine was investigated. It was found that the maximum change was attained within the first minute after injection. The mean rise in systolic pressure in the schizophrenics was 43.8 mm., and in the normal subjects, 56.2 mm. The difference between these two values is statistically significant and indicative of a diminished reactivity to the drug in the psychotic group. In the case of the diastolic pressure the reaction was quite variable and the mean change in both patients and normal subjects was slight. There was, however, a greater tendency for the patients to show a rise in the diastolic pressure. In them the mean increase in pulse-rate was 13.6 beats per minute, and in the normal subjects 16.3 beats. No correlation was found between the extent of the reaction and the initial levels or between the reaction to epinephrine and the rate of oxygen consumption, nutritional index, schizophrenic subclass, psychiatric status, or emptying time of the colon. Age apparently had a slight effect in lessening the total degree of response. No characteristic syndrome of autonomic balance was found in schizophrenia.

C. S. R.


Schizophrenia is not regarded as a constitutional disease or a psychogenic reaction, but a disorder of the total personality resulting in dissociation of functions up to complete dissolution, and, on the other hand, capable of showing remissions. While the causes are undoubtedly multiple, it is said that the constitutional element (somatic) responsible for the production of