

Summary.

INVESTIGATION OF PSYCHICAL MANIFESTATIONS OF DEFECTIVE SCHOOL-CHILDREN.

Introduction. In Czech literature there is as yet no work on therapeutic pedagogy based on investigation of psychical phenomena. And we find but few such works in other literatures, the books of Demoor, Thorndike, Claparède, Decroly, Meumann, Kemsies, or Bechtěrev being the most important of them.

I. *Scale of psychical elements.* Older systems of psychology generalize as a rule some of the psychical phenomena and make them the basis of the psychical life. The synthetical notion of psychical action requires it that a deterioration of one psychical function should bring with it the deterioration of another; but this is not the case. The pluralism of psychical elements, their variations and combinations make it possible to regard the psychical phenomena as a conglomerate of various psychical elements. In this respect we can speak of different elements as equivalent in the psychical life. These elements are organised in complexes in accordance with the psychical development of individual lives. The genetic scale comprises, in the first place, primitive movements, secondly sensations, then abstractions, ideas, thoughts, and images. The following psychical states and manifestations are brought about by combination or inhibition of the preceding ones. The investigation of an individual from the psychological point of view must be founded on intrafunctional causality.

II. *Psychical complexes.* Psychical complexes are carried into effect through simpler elementary processes. The psychology of complexes uses a special method for this purpose, the so called tests of intelligence. Its chief defect is the impossibility to determine the special cause, the origin of incapacity of defective.

school-children. Only a thorough analysis of elementary psychical processes can solve this problem in a satisfactory way.

III. *The bases for the investigation of mental manifestations.* A mental quality is a mere disposition, which is brought to our notice by means of outward manifestations, that are related to it in a certain degree of adequacy. Its stableness is only a relative one. The collective study which fixes the average must be accomplished by individual study, for no real individual with all its complexity and mutability is identical with any average. The main aim of individual investigation is to state the causes of anomalies. The study must be therefore liberated from the suggestive authority of the average or the type, and must get to the very elementary facts, studying them by the help of special diagnostic stimuli. It turns its attention mainly to anomalous individuals. The real state of the deviation can be found in the first place by the help of some degree of intuitive sight, which may be applied at the very start of the individual experiment: when we are discussing the environment of the pupil and his whole life in general. Then we must take careful notice of all his senses, for it has been found that it is often some want in the sensual life, that has caused the anomaly. Of importance is the psychomotory activity, the coordination, which is not a little affected in abnormal children. Here lies the cause of all faults of writing, of drawing, of speech, which is the most subtle of motory coordinations. By the type of memory we have found we ought to be guided as to the stimuli which are to assist the amendment. The results of the individual investigation are compared with the average (Tables 1.--6.). The tables give the achievements of memory as related to age (T. 1.), the achievements of acoustic memory compared with school qualifications (T. 2.), the same in case of optical memory (T. 3.), a comparison between the two (T. 4.), the acoustic memory of abnormal children (T. 6.). Anomalous children show an altogether different attention. When restoring the power of concentration, we must start with some activity which excites the child's interest. The quantity of attention is ascertained by the achievement; for this purpose we use the Bourdon test and the dotting of geometrical figures in the cases of the imbecile. Table 7. gives the number of slips as related to

age. The power of imagination, which largely correlates with the talents and intelligence, is ascertained by means of a suitable subject for a composition. The written achievement is normal with most children according to their evolutionary level. Children suffering from motory or mental anomalies are, however, to be exempt: the abnormality of the former reveals itself by non-regular or abnormal characters in writing and that of the latter by faulty spelling. The amendment must be based on the psychical nature of the anomaly and brought about either by means of motory actions or in cooperation with an acoustic-optical treatment, representing the method of association. The anomalies in reading are due partly to an insufficiently automatised physiological action, and partly to the want of connection between the meaning of the word and its outward form. This anomaly can be treated by the analytical method, which turns to the elements, and specially by the synthetic method, which proceeds from the whole words to their symbols. Our aim is a firm connection between the meaning of the image and its verbal, acoustic-optical expression. A good means of diagnosis is also an arithmetic achievement of an abstract character, on which the facility, correctness and degree of abstractness are of special interest. Weakminded children count usually analytically, by one. The amendment aims at raising the level of abstractness. An achievement in drawing shows the technical evolution from the horizontal line to the vertical and to the curves, and the material evolution progressing to a greater number of details and their proper relation. Poor results in both of these evolutions are characteristic with imbecile children. The cause is usually hidden in the motory centres and reveals itself by a general slowness of the child. The diagnosis aims at ascertaining the state of his ability to recall images, of his attentiveness, his imagination, his perception of colours and of space and act relations.

IV. *Examples of investigation and of amendment.*

Charles P. (8 years old). Both sight and hearing are normal. The speech is clouded. The sphere of ideas limited, imagination extremely passive. Attention wandering. The acoustic memory weak, the optical still weaker. The arithmetic achievement as well as that in drawing abnormal (3—4 years).

The treatment: pronouncing of concrete words on noticeable inscriptions (firms, picture-houses etc.). Connecting of ideas with the symbolism of the alphabet. Proceeding from whole words to syllables. Forming of conceptions is rather slow and requires constant assistance of grown-ups. These exercises were followed by an improvement.

Cyril F. (10 years old). His whole evolution slow. Since the optical memory is more effective, the written work is practised by means of copying, reading ability and arithmetics by means of silent reading. The improvement is remarkable specially in arithmetics, but also in general liveliness.

John K. (8 years old). Weak memory, bad writing and reading. The treatment started with the writing, and both in it and in the reading his interest was attracted to such elements, which he could easily imitate.

Slávek S. (8½ years old) bad coordination, weak memory, poor writing and reading. Written exercise is to achieve in the first place optical-motory associations and then optical-motory-acoustic ones. These assist also in reading—both in the case of the analytical method (the folding alphabet) and the synthetic method (the spelling-book) which is to furnish the optical symbols with fitting ideas.

J. V. (8 years old). Weak activity in the sphere of ideas and imagination; narrow stretch of attention and faulty pronunciation of hissing sounds. The ability to form ideas is practised by the method of Winche, the sphere of attention is enlarged tachystoscopically, the hissing sounds practised in certain syllables.

The summing up: On the whole no anomalous child is anomalous in every respect. The defects must be discovered by individual investigation of psychical elementary phenomena, and must be treated by strictly individual methods. Every anomaly can be modified, at least to some slight extent.