Self-regulatory Brain Mechanisms and Hypnosis

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In contrast to many papers delivered during this congress, this contribution does not focus on functional changes which came about as a result of certain techniques or stimuli applied by a hypnotist (or his substitute) to the brain of a hypnotized subject. This paper concentrates on description of the dynamics of those self-regulatory and self-curative brain mechanisms which tend to unfold in persons who practice Autogenic Standard Exercises regularly. A number of years ago my interest was aroused by the frequent occurrence of training symptoms which had little or no obvious relation with the functional theme of the Standard Formulas.

A closer investigation of these training symptoms, as for example, muscular twitches, pain, feeling of nausea, spontaneous colors or images, crying etc., revealed that a number of them appeared to be related to the patients’ complaints, their actual clinical state and certain traumatizing or disturbing events in the patients’ past. Furthermore there appeared to be a striking similarity between these training symptoms and certain types of discharges occurring in epileptic patients and discharges elicited by direct stimulation of cortical areas as described by Penfield and others.

More detailed studies of these training symptoms led to the conclusion that the spontaneous discharges occurring during Autogenic Training indicate the existence of a centrally located brain mechanism, which functions as a co-ordinating system for different types of discharges involving cortical and subcortical neuronal systems of both hemispheres. With reference to what Penfield has called the ‘centrencephalic system’ it was postulated that there exists a self-regulatory centrencephalic safety-discharge mechanism which participates decisively in self-curative activities by providing for selective facilitation of discharges from those neuronal circuits which are overloaded or have a need for normalization for other reasons.

The discharges occurring during Autogenic Standard Exercises are usually of brief duration and have been called Autogenic Discharges. In case the trainee does not terminate autogenic exercises at the end of passive concentration on the formulas, but remains in the autogenic’ state and then allows a mental shift from passive concentration on autogenic formulas to a mental activity which has been called ‘passive acceptance’ (‘carte blanche’),
the fractioned type of brief autogenic discharges then tend to develop gradually into more complex and coherent patterns of discharges.

These brain-directed, prolonged and systematized processes of self-starting and self-terminating discharges have been called *Autogenic Abreaction*.

Both, autogenic discharges of brief duration and prolonged processes of autogenic abreaction follow a pattern which frequently involves repetition of the same functional theme. The repetition of discharges from various areas of the brain involves functional variables of psychophysiological nature which originally participated in bringing about case-specific disorders of psychodynamic and psychosomatic nature. The subjective experience of the release of these discharges constitutes a repetative confrontation with functional elements related to traumatizing and disturbing material stored in the patient’s brain. This brain-directed self-regulatory process of repetative confrontation with disturbing material selected from one’s own brain is essential for normalization of psychodynamic and psychosomatic disorders.

This self-normalizing activity of all those brain functions which participate in bringing about autogenic discharges and autogenic abstractions are called *Autogenic Neutralization*.

The impressive curative efficiency of Autogenic Neutralization is viewed as a functional result of the precision work of various brain mechanisms which are governed by what may be considered principles of biologic wisdom.

One essential feature of the inherent biologic wisdom at work, is for example documented by the fact, that the brain, provided it receives correct collaboration by its owner (and the therapist) follows a pattern of release and confrontation, which does not exceed the limit of psycho-physiologic tolerance of the patient or certain parts of his system.

In other words the brain does not release more than the patient and his system can take at a given time.

For example instead of forcing the patient to re-experience a traumatizing and life-threatening car accident all at once, which would be intolerable to the patient, the brain will take up the matter by presenting and neutralizing functionally dissociated small sections or phases of the accident. Following a specific pattern, the self-regulatory brain mechanisms will repeat the functional theme of each of these disintegrated sections a certain number of times before proceeding to start neutralizing the next item. As this type of highly systematized piecemeal neutralization of various physiologic and psychologic phases of the accident has opportunity to continue, the various sections of different phases are gradually neutralized and put in correct order like the pieces of a complicated puzzle. – Periodically the brain will repeat a specific section or a complete phase of the accident, as if to verify if these parts of the accident are sufficiently neutralized. – In case these *automatic processes of verification* do not provoke untoward