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INVESTIGATIONS OF SO-CALLED 'EXTRASENSORY' PERCEPTION

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[Article by Natalia Karlovna Lipgart, doctor of **medical sciences**, department head, Vsevolod Victorovich Ivanov, scientific associate, and Boris Konstantinovich Pashnev, psychologist, Kharkov Research Institute of Neurology and Psychiatry]

[Text] We set the task of investigating the psychophysiological mechanisms of so-called "extrasensory" perception. More than 300 essentially healthy subjects of both sexes, different ages and educational requirements, and a wide range of occupations, as well as 32 so-called "extrasenses" possessing, according to their claim, phenomenal powers, took part in the investigation. We selected man's "perception of biofields" and the "biofield effect" as the examined phenomenon.

Mechanisms of appearance of "field sensations" under conditions of simulation of apparatus irradiation were initially clarified in experiments. The experiment was conducted with a group (38 people) of essentially healthy subjects of both sexes aged 19 to 32.

The "irradiation" of subjects on an individual basis by a device consisting of an oscillograph of the 30-1 type and a VZ-3 voltmeter with a high-frequency head, which played the part of a "directional antenna," was simulated. The apparatus was not connected to a network.

The "radiator's antenna" was moved by experimenters successively closer, farther, and to the right and left of the subject positioned in front of it at a distance of 1.5 to 2 m. Furthermore, a change in "irradiation frequencies" by switching voltmeter tumblers was simulated three times.

Before the beginning of the experiment subjects were given a stereotype instruction to the effect that new equipment for a remote effect on man would be investigated. It was pointed out that subjects should seemingly become expert evaluators, because the capabilities of this apparatus were not yet known. Perhaps, it did not have any capability of affecting man. Thus, subjects were not clearly programmed to receive the given sensations.

Before the beginning of the experiment subjects were supposed to analyze the existence (or absence) of any specific or nonspecific sensations during rest. Such sensations were not noted in the overwhelming majority. A mild headache was observed in one man and the phenomenon of rhinitis, in another.

In the course of the experiment subjects were instructed to closely follow and, upon the completion of the experiment, to record in their self-reports their sensations and the dynamics and localization of the latter, as well as to give their interpretation of the reasons for the change in sensations (distance, direction, and "power" of irradiation).

All subjects noted the appearance during the experiment of specific indefinite sensations (heat, cold, tingling, vibration, pressure, etc.) with a primary spontaneous localization in the areas of the wrists and the head. The appearance of spontaneous visual illusions (light and so forth) was noted in eight subjects. The dynamics of sensations fully corresponded to the simulated "switching of the instrument" and had an appropriate interpretation by all subjects. It is characteristic that in the indicated two cases of indisposition before the beginning of the experiment (headache and rhinitis) disease symptoms disappeared after "irradiation."

As a consequence of another experiment with a similar instrument, in which 27 essentially healthy subjects programmed to receive the given sensations took part (the instruction stressed the efficient effect of the instrument on man), identical results were obtained. However, it should be stressed that in this group sensations recorded by subjects were more pronounced and localized than in the first group and, furthermore, relaxation and somnolence occurred in six subjects.

An analysis of self-reports and observations makes it possible to interpret the sensations of subjects as an activation of "sensory noise" in the sphere of cutaneous and other analyzers under conditions of expectation of an undetermined effect. On this basis the mechanism of probability forecasting actively forms the presumed sensations or states in the sphere of the appropriate analyzer. A subjective evaluation in self-reports of the phenomena of perception arising in the process and the localization and degree of their intensity corresponded to the subject's psychological set and the degree of his assumed information on the nature and "quality" of the effect.

Thus, depending on the subject's psychological set a self-evaluation of his occurring sensations potentiated their further development according to mechanisms of autosuggestion even up to the level of illusory perception. Therefore, we assume that in the process of formation of illusory perception not only suggestion, but also autosuggestion, can play an especially important role.

For the study of the "biofield effect" we conducted the following experiment, in which 58 essentially healthy subjects of both sexes aged 16 to 40 took part.

Before the beginning of the experiment subjects were given a standard instruction to the effect that six "extrasenses," of whom one was "especially

strong," one was "weak," and four were approximately at the same level of "strength" would successively conduct an experiment with them now. Subjects were supposed to record in their self-reports their sensations and state and the dynamics of the latter, as well as to give an evaluation of the "strength" of every "extrasense." Then six people, of whom three were "extrasenses" and three, ordinary experimenters (not extrasenses) unknown to the subjects, who imitated the behavior and reaction of "extrasenses," successively worked with every subject.

A total of 15 "extrasenses," whose "powers" were recognized by a wide circle of individuals, were used in experiments.

Subjects were divided into two groups (26 and 32 people). In the first group at the beginning "extrasenses" and then experimenters exerted an "effect." In the second group the sequence of the effect was the opposite. The absence of verbal communication between individuals exerting the effect and subjects in the process of the experiment was a mandatory condition.

The experiment consisted of 10 min of individual effect of every participant--an "extrasense" or an experimenter--on a subject. The entire experiment was conducted in the standing position. "Irradiation" was carried out by palms and fingers at a distance of 20 to 50 cm from the examinee's body with the use of gestures and passes over local sections of the subject's body, head, and limbs.

Every "extrasense" filled in a self-report, in which he recorded his sensations and ideas during the "effect," and also described his methods and pointed out their objective and presumed effect on a subject. Control was carried out by two experimenter-observers, who separately recorded the course of the experiment, actions of "extrasenses" and imitators, and external reactions of subjects. Every subject also filled in a self-report, where he recorded all his sensations during a session and their strength.

An analysis of self-reports of the subjects showed the appearance in them during the "effect" of "extrasenses" and imitators of specific sensations in many respects similar to those arising during a simulation of the irradiation apparatus, but much more extensive in localization and manifestation--heat, cold, tingling, vibration, "electric current," pressure, "flow movement," light flash, and so forth--as well as (in 32 cases) the development of lightness, heaviness, somnolence or (21 cases) excitation, disturbance in statics, and "freezing" of hands. The appearance of hand numbness was noted in three subjects and an increase in the sensitivity of wrists, in nine. Spontaneous sensomotor reactions--an involuntary lifting ("surfacing") and movements of hands and turns and inclinations of the trunk and the head accompanied in most cases by sensations of "strength of an undetermined nature" "moving" the body, a limb, or the head--occurred in 16 subjects. In two cases movements were not noted by the subjects themselves. Complex sensory illusions were noted in 26 subjects.

Reports by subjects of both groups showed a complete identity of sensations and reactions under the effect of "extrasenses" and imitators. Moreover, in their self-reports 23 people determined one of the imitators as the "strongest

extrasense" and 22 people pointed to three "recognized" "extrasenses" as the "weakest."

An analysis of the self-reports of "extrasenses" also showed the existence of pronounced sensory sensations and phenomena of exteriorization of tactile and visceral illusions of the type "emanation of energy flows," "sense of nonuniformity of the field," "sense of contiguity and effect of one's own biofield and of the subject's biofield," and so forth.

Pronounced visual illusions in the form of "luminescence of energy" and a "color aura" in the subject and visions of "energy flows" and the "astral body" of the subject, as well as their "changes" under the "effect" of an "extrasense," were noted in 9 (out of 15) "extrasenses" during their effect. Actions and methods (passes, movements, and so forth) were performed by "extrasenses" in full accordance with the dynamics of change in their sensory illusions. In all self-reports "extrasenses" noted their absolute confidence in the reliability of the indicated phenomena experienced by them and, in their opinion, adequately evaluated the actions of the examined subject.

The interpretation by "extrasenses" of their own actions and images in 15 participants in the experiment was of the nature of traditional occult symbolism: in two "extrasenses" the nature of interpretation was in accordance with the traditional Yoga system and in one, mesmerism. In other cases the interpretation was of a "mixed" nature of the indicated systems, distorted ideas of a system, "meridians" of zen-zhu therapy, and hallucinations of an "extrasense."

Similar results were obtained in another experiment conducted with 32 subjects according to a complicated scheme. Eight "extrasenses" were instructed to evoke in subjects a number of specific sensations and states according to a given program. In this case, subjects were not supposed to see the "extrasense" (the effect was produced from behind). A comparison of the self-answers of subjects and of "extrasenses" with the indicated program revealed a complete spontaneity of sensations arising under the "effect." It is significant that the difference in individual modes of effect of "extrasenses" and imitators did not have an effect on the nature of occurring sensations, correcting exclusively their localization and manifestation ("strength") according to mechanisms of probability forecasting and evaluation.

For the purpose of determining the role of reproducibility of the nervous system in the "perception of the biofield," the following experiment was conducted with 18 subjects participating in the previous experiment and determining one of the imitators as the "strongest extrasense." Subjects were notified of the time (2200) and day when the "effect would be exerted" on them by the "extrasense" chosen by them as the "strongest." They were advised that the effect would last 15 min and instructed to record their sensations and state in detail. At the same time, it was stipulated that subjects would be in domestic surroundings and "extrasenses," allegedly in a laboratory. In reality, no effect was produced and the indicated imitator was not notified of the experiment.

In this experiment the self-reports of the subjects showed a complete qualitative coincidence of sensations occurring in them at the appointed time with the sensations of the "effect" experienced by them earlier. Moreover, intensification of occurring illusions, a significant development of the hypnoid state, and a change in the perception of one's body--"absence of the body," "weight loss," and a "cloud and lightness in the head"--which passed after the appointed time of the session, were noted in six subjects. In our opinion, this points to the dominating role of autosuggestion in the formation of the "perception of the biofield." At the same time, it is obvious that illusions arising in such a way are the product of a reproducible activation of sensory systems under conditions of absence of a real effect.

Thus, an analysis of the obtained investigation data shows that the occurrence of sensory illusions of the "biofield effect" is based on an activation of "sensory noise" under conditions of expectation of an undetermined effect. The development of "biofield sensations" and their dynamics and intensity are formed by unconscious autosuggestion.

In turn, as shown above, the autosuggestive formation of "imaginary perception" is intensified and corrected by the actions, mimicry, words, and visible state (tension, quickened breathing, and so forth) of an "extrasense," which, in their essence, are purposeful (although usually unrealized) suggestive methods. Under conditions of expectation of an "unusual" effect and, especially, when the subject exposed to it has a high personal motivation (for example, hope for recovery), in fact, any stimuli emanating from an "extrasense" and connected with the subject's personal motive become agents of suggestion.

Exerting a powerful and complex suggestive effect on the subject's psyche through the mechanism of probability forecasting, in a number of cases it is possible to attain a psychosomatic reaction adequate to the task set (for example, analgesia, hyperesthesia, etc.) by "extrasensory" methods.

As shown by comparison of the results of the "effect" of "extrasenses" and of experimenter-imitators, the role of any physical factor is absent in the process of "biopolar effect."

At the same time, as the results of an analysis of self-reports by "extrasenses" have shown, their possession, in their opinion, of "superpowers" is the result of an inadequate interpretation by "extrasenses" of a number of unordinary and often pathological sensations. Similar sensations of the type of senestopathies and kinesthesia are potentiated by unconscious autosuggestion to the level of sensory illusions and pseudohallucinations (and in a number of cases true visual, auditory, and other hallucinations as well).

Thus, the investigation conducted makes it possible to draw a conclusion on the psychological nature of so-called "extrasensory" perception of "biofields"

and of the "biofield effect," which is based on an inadequate perception of subjective sensations potentiated by suggestive effects.

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