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## WHAT IS FEAR IN TERM OF PSYCHOLOGY?

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There is nothing worse than fear itself.  
Francis Bacon*

Fear is a feeling through which every person has repeatedly passed through his life. All people, of all ages and nationalities, have ever experienced fears. Fear can kill, or it can save. Fear can help, or it can lead to despair. Generally speaking, moderate fear is a natural reaction of a person to any real or imaginary situation that threatens the values of that person. This value can be health, physical integrity, it can be an idea, it can be a picture of oneself, children, comfort, etc.

### Classification of fears

Normal (natural or age-related) and pathological levels of fear are distinguished. Conventional fear, for a short time, is reversible, disappears with age, does not affect a person's deeply valuable orientations, does not significantly affect his character, behavior and relationships with people around him. The pathological level of fear is manifested in extreme, dramatic forms of expression (horror, emotional shock) or in a protracted, obsessive, difficult to reverse course, involuntary, that is, a complete lack of control on the part of consciousness, an adverse effect on character, interpersonal relationships and the person's adaptation to social reality. [1]

### Fear reaction levels

Due to the complex structure of the brain, the fear reaction can proceed at two levels. The so-called low level works as follows. Take, for example, the case of the sudden opening of the door. Having received a stimulus - an unexpected movement in the doorway or a corresponding rustle, the brain sends this data to the organ located at its base - the thalamus. The thalamus, in its turn, has no information about the degree of danger of what is happening and, in any case, begins to "sound the alarm", transmitting impulses to another key brain structure - the tonsil. The tonsil, having received the signal, gives the command to the human vegetative system to maximize all resources and prepare the body for the so-called reactions: fight or flight.

A high level of fear reaction is organized somewhat differently. Having received the same stimulus about a possible danger, the thalamus sends a signal to the sensitive cerebral cortex, which, thanks to its complex organization, starts

trying to interpret this information: "Is the door necessarily opened because there is a cold-blooded killer behind it or it can be a simple wind, and maybe a cat?" Next, from the cortex, there is a request to an organ called the hippocampus, located on the inner surface of the hemispheres. The hippocampus, with access to human memory, seems to be asking leading questions: "Have situations like this happened before and if so, what did they turn into?", "What other reasons could make the door move?", etc. The more complete picture of the probable situation thus gathered allows ordering the tonsil and thalamus to turn off the 'Danger!' mode. [2]

#### Phobias, fear and anxiety

Mental disorders, in which some situations or objects that are conditionally not dangerous, cause anxiety and fear, are called "phobias." A. I. Zakharov noted that anxiety and fear are united by a common sense of anxiety. But, unlike fear, anxiety is "an emotionally keen sense of an impending threat." Most often, anxiety arises as an expectation of some event that is difficult to predict and which can threaten unpleasant consequences.

#### Hormones of fear

When we are afraid, certain specific hormones are produced, as well as special molecules called peptides. The most famous hormones are adrenaline ("rabbit hormone") and norepinephrine ("lion hormone"). The main task of adrenaline is to adapt the body to respond to stress. Norepinephrine is both a hormone and at the same time a neurotransmitter. Its level also rises in a state of stress, shock and other similar conditions. Both hormones cause tremors. Immediately after determining the stressful situation, the hypothalamus releases corticotrophin into the blood. Corticotrophin, reaching the adrenal glands, induces the production of adrenaline and norepinephrine.

An interesting fact, in ancient Rome, those slaves who turned pale with fear were included, and those who turned red with a sharp fright were excluded from the warriors. [3]

#### Why do we feel fear?

If we were not afraid, it would be extremely difficult to survive. We would fearlessly cross the busy highway, run along the roofs and walk barefoot among the poisonous snakes. During evolution, people who survived and passed their genes to their descendants were afraid, and they were afraid of the right things.

Of course, most of us no longer struggle for life in the wild, but fear is by no means an outdated instinct. Now, thanks to him, we hold our wallet tight, walking along a busy shopping street and decide not to go through a dark deserted park. The incentives for fear have changed slightly with the development of civilization, but it still serves to survive. [5]

#### Fear and Associations

Human's scheme of the reaction of fear is honed in the process of evolution. However, there is another way of its formation - the individual.

In 1920, psychologists conducted an extremely controversial experiment. John Watson selected an eleven-month-old baby Albert as the test subject, and tried to instill in him a fear of rats. Before the study, the child was sympathetic to

these animals. The experimenters' actions were based on Pavlov's doctrine of conditioned reflexes and the work of higher nervous activity: a white rat was taken as a neutral stimulus to which fear was supposed to be instilled. As soon as the baby saw the rat, an unbearably loud sound was heard in the office. As a result, the child not only very quickly learnt to be afraid of white rats, crying and trying to escape every time he saw at least one, he also began to cry in the presence of other furry animals and even a Santa Claus mask with a white beard.

Just like the fear of little Albert at the sight of white rats, phobias, for example, fear of dogs, most likely, are also based on a conditioned reflex. It happens that a person was bitten by a dog at an early age. Dozens of years later, his brain (in particular, the tonsil already familiar to us) continues to associate the look of a dog with pain from a bite. [6]

10 most popular human fears:

1. Fear of death
2. Fear of loneliness
3. Fear of public speaking
4. Fear of failure
5. Fear of terrorism
6. Fear of nuclear war
7. Fear of spiders
8. Fear of rejection
9. Fear of the dark
10. Fear of heights

Many points relate to irrational experiences, whether public speaking or heights. You can also be afraid of the onset of nuclear war, but this does not make sense: you can only attend to the problem and prepare for it if it does happen.

Therefore, we must first of all realize that in the modern world we are afraid of our own thoughts and fantasies, and not reality. [4]

Fading memory of fear

The main problem of diseases caused by stressful effects is the inability of patients to inhibit the manifestation of memory of unpleasant events. Therefore, treating diseases caused by the prolonged persistence of fear reactions, doctors use the procedure of quenching the memory of fear (for example, present objects or situations that cause fear to the patient in the absence of any threat). Extinction is not forgetting fear. The differences in the extinction process are as follows:

- During extinction, a new trace of memory is formed;
- Extinction is the result of a changed hierarchy of newly learned answers when newly acquired behavior replaces a previously formed conditioned reflex. [7]

7 secrets for the disappearance of fear

1. It doesn't matter why you are afraid. Understanding the cause of fear is not the key to overcoming it, the desire for analysis sometimes only distracts from the struggle.

2. Learn more about the thing you are afraid of. Uncertainty is a powerful component of fear.

3. Train. If you are afraid to try something because it seems difficult or scary, you should start small and work on gradual progress.

4. Find someone who is not afraid. Try spending some time with someone who has no fear of what scares you. To transfer fear alone is much more difficult - get support.

5. Don't be afraid to talk about what's bothering you. Fear, spoken aloud, seems a little less powerful.

6. Come up with various games and tricks to help cope with fears. For example, if you are afraid of public speaking, try to imagine that the audience is completely naked. Feeling like the only dressed person in the group, you will feel a little more confidence.

7. Achieve victory in stages. Think not about the whole picture of overcoming fear, but about taking each next step. If you are afraid of heights, do not immediately climb a skyscraper. Start climbing its steps. [8]

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