

# Psychology and Economic Aspects of Life Safety

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**Abstract:** *A high level of development of human creative abilities allows you to create a system of coping with stress in a wide variety of and unexpected situations. The increasing complexity of production processes and equipment has changed the functions of man in modern production: the responsibility of the tasks to be solved has increased; the amount of information perceived by the worker and the speed of the equipment increased. Human work has become more complicated, the load on the nervous system has increased and the physical load has decreased.*

**Keywords:** life safety psychology; individual psychological characteristics of personality; stress; economic aspects of the basics of life safety; economic importance of measures to improve conditions and labor protection.

## Introduction

A change in human activity and behavior in excise situations has been noted for many centuries. Even in ancient Sparta, one of the selection criteria for military service was the recruit's reaction to a fearful situation - those who turned red - were accepted, but those who did not turn white. It was believed that blood rushes to the head, and the warrior becomes more fearless. During the Russo-Japanese War, G.E. Shumkov (1913) described the "state of mind of soldiers in anticipation of a battle." It manifested itself in people in unusual fussiness, hypersensitivity to ordinary irritations. The boot stung more than ever. Movements became less coordinated, fingers naughty, matches broke, tobacco crumbled, handwriting changed. The pulse quickened, breathing became frequent and uneven, thirst, dry mouth and throat appeared. Increased suggestibility was noted.

At the biopsychic level, two types of emergency response are distinguished:

1) The inhibitory type of response is characterized by general muscle tension, which is especially pronounced in the "facial mask", stiffness of posture and movements; fixations of attention, passivity, slowed down course of mental processes, a kind of "emotional inertness", manifested in the form of indifference and negative indifference. This type of people is characterized by such behavioral features as numbness, a state of stupor, apathy, lethargy. This condition is called stuporous.

2) The excitable type of response is expressed in violent extraversion, fussiness, verbosity, hypertrophy of motor manifestations, quick change of decisions, increased ease of transition from one type of activity to another, incontinence in communication. This type of personality is prone to show erratic activity, inability to purposeful activity, disorientation. This condition is called agitation, and the behavior is fugimozzy. People in this condition can be a danger as a causative agent of panic, or by rushing about to get into dangerous focal zones.

## Materials and Methods

Psychologists note a general tendency to lower the stability of mental processes, which can be expressed in a "blockade" of perception and thinking, memory and practical actions of the subject; this, in turn, can lead to a physical breakdown of activity, self-removal of a person from continuing to work. Expressed personal anxiety also has a great influence on the ability to act adequately in a stressful situation.

Types of a person's relationship to himself. The behavior of a person in stress is influenced by the types of his relationship to himself.

There are three types of relationships of a person to himself in a situation of stress:

- attitude to oneself as a "victim" of an extreme situation, fixation on such an attitude aggravates stress, we can call this attitude "primitive-selfish";

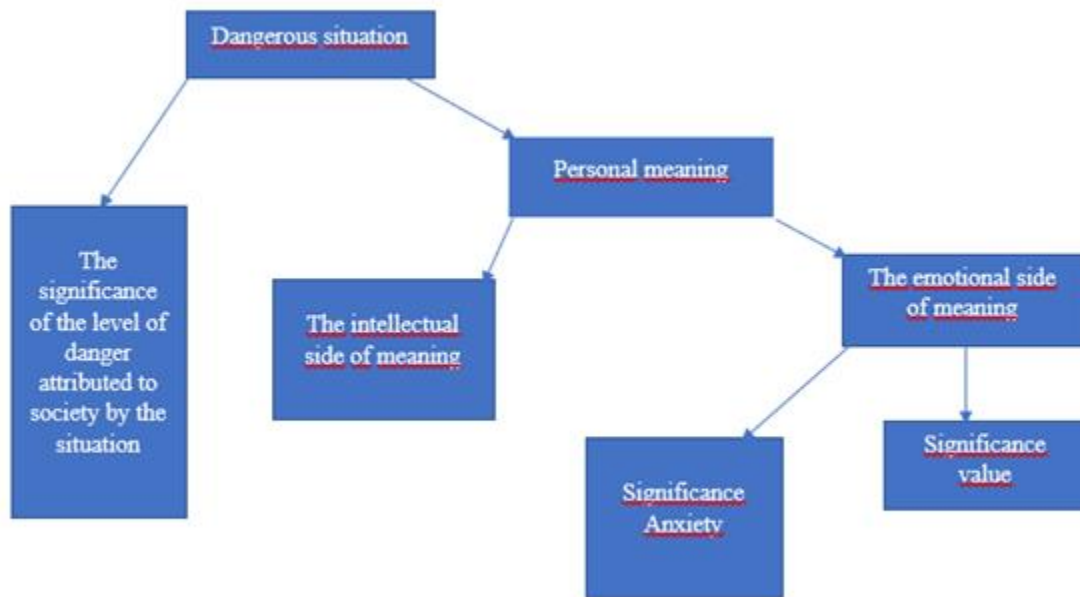
- the combination of the attitude to oneself as a "victim" with the understanding of oneself as a "value" entrusted to oneself, such an attitude can be called objective-individualistic, it contributes to the self-preservation of the individual;

- attitude to oneself as to one of a number of people, this type of attitude contributes most to the preservation of effective activity during stress.

Attitude to the situation, its differentiation according to the degree of danger. Experience in situations of traumatic stress.

### Results

A person's behavior in a traumatic situation depends on how it is accepted by the person himself and how much it is regarded as dangerous by society. The attitude to a dangerous situation consists of the danger that is attributed to the given situation by society, personal meaning for the individual, who, in turn, carries an emotional and intellectual load. The emotional side of the relationship, in turn, consists of significance-value and significance-anxiety (see Fig. 4).



**Fig. 1. Facts of formation related to a dangerous situation.**

An individual's perception of a situation as highly dangerous can cause him to be overwhelmed by excitement and help to reduce his psychophysiological abilities, if the danger is recognized, but an excessive assessment is not given to it, then it can help to mobilize forces. The person's attitude to danger and the degree of adequacy of its assessment is interconnected with the possibility of accidents and other incidents, and therefore the attitude to danger and the adequacy of assessment is the basis of the task of safety psychology.

A person's ability to behave appropriately in an extreme situation and adapt to changing conditions depends on his experience of the action or, at least, observation of the actions of others in similar situations. This gives him the opportunity to use the behavior observed in the past for more successful adaptation and coping with stress. Experience is gained in the process of life and increases the subject's confidence in his abilities and abilities to cope with a stressful situation, but there is also a flip side to the coin - excessive self-confidence did not bring anyone to good.

Personality resources - abilities that allow an individual to maintain a sense of stability and integrity in different situations and at different times:

- the ability to survive, tolerate and integrate strong influences;
- the ability to maintain a sense of vitality, a positive attitude, confidence that you are worthy of love;

- the ability to maintain a sense of connection with other people, Ego resources (abilities that allow an individual to realize his needs and interact with other people);

- self-awareness skills: intelligence, ability to introspection, willpower and initiative, focus on personal growth, awareness of one's own needs, ability to see prospects;

- interpersonal interaction and self-help skills: the ability to anticipate the consequences, the ability to establish mature relationships with others, the ability to set boundaries in interpersonal relationships.

Psychological needs and cognitive patterns consist of the following:

- Security: a sense of security for yourself and your loved ones;
- respect: a sense of self-worth and the ability to value others;
- trust / dependence: the ability to be self-confident and fulfill your needs; recognize the right of another person to have their own opinion and fulfill their needs;
- control: the ability to control one's feelings and behavior in interpersonal relationships, as well as influence other people;
- intimacy: the ability to be in contact with oneself and to feel connected with others.

Methods of working with victims vary depending on how close or removed the traumatic factor is in time. Nevertheless, there are general principles for the correction and treatment of survivors of a traumatic situation.

The principle of normalization - a normal individual, faced with abnormal circumstances, experiences extraordinary feelings. The therapy begins with a discussion of the feelings experienced and an explanation of their normality. This can help the victim understand the causes of their symptoms, their dynamics and participate more actively in the therapy process.

The principle of partnership and personal dignity. People experiencing a traumatic situation are vulnerable, sensitive, prone to self-incrimination, a feeling of powerlessness or increased aggressiveness. Such a style of response causes rejection of others, increasing the feeling of inadequacy and guilt, leads to a decrease in self-esteem. Therefore, the establishment of a cooperative relationship is so necessary.

The principle of personality. Each person goes their own way to recover from stress. And it is also important to consider in the process of therapy.

The more time has passed since the moment of the injury, the higher the level of qualification required for the provision of psychological assistance due to the fact that post-traumatic stress is increasingly associated with other psychological problems.

Psychotherapy of victims can last from one month to several years, depending on the severity of its psychological maladaptation. If the expected changes do not occur, then this can be experienced by him as a feeling of loss of control or "abnormality". These feelings can further traumatize a person, temporarily raising anxiety and delaying recovery. This aspect of therapy needs to be worked out either in an individual session or in group work. Such a study should be carried out under the guidance of a trained psychologist or psychotherapist who has experience in group and individual work.

### **Discussion**

If a person is stressed, he has an adrenaline reaction, he does not pay attention to bodily reactions, feels fear, anger. This condition mobilizes him to fight or to escape. When this stress is excessive, a person feels helplessness and horror. The right hemisphere of the brain is excited, the visual part of the cortex is activated. In this case, the left hemisphere is inhibited, which is responsible for analysis, logic, the speech center of the cortex is inhibited, that is, a person experiences a strong emotional shock without subsequent verbalization of the state.

Causes of self-destructive behavior in people who have experienced traumatic stress:

1. A person who has survived an injury seeks to repeat it in order to respond to it. So, a person who did not have the opportunity to save loved ones during a fire will see a fire an infinite number of times in a dream and save them, or he will go to work as a firefighter in order to try to survive everything anew, but with a successful ending. Which, of course, is impossible: the past cannot be returned. Nobody has ever succeeded in this before.

2. Feelings of guilt, acting as the basic experience of any traumatic stress. We have already said that guilt is always destructive and aimed at self-destruction, experienced as a well-deserved punishment for misconduct. For a person with guilt, the worse his life, his health, etc., the better. He is not determined to change anything for the better. It is contraindicated for such people to become leaders and be responsible for others, as they try to destroy themselves and their innocent relatives with themselves; they have a disturbed sense of value in both their own and others' lives. They may be prone to excessive risk, exposing him and themselves, and others. This stems from the fact that, compared with the traumatic experience, all other life events inherent in a "peaceful" life seem gray, boring everyday life. In order to compensate for the "lack of impressions", such people are prone to risky actions, to abuse of psychoactive substances.

Any citizen has the right to work in conditions that meet the requirements of safety and hygiene - this right is enshrined in the Constitution of the Republic of Uzbekistan. Ensuring that a worker has safe working conditions is the employer's duty, also enshrined in law. Naturally, the employer is forced to bear some financial costs aimed at fulfilling this obligation, and these costs inevitably affect the cost of production. Therefore, it is clear that any employer seeks to reduce labor protection costs. The question is how to do this correctly, without violating the requirements of the law and without affecting the interests of workers, and at the same time ensure the highest return on money invested in ensuring safe working conditions.

Many managers mistakenly believe that labor protection costs are not effective because they do not bring additional profit. In this case, the attitude of such leaders to labor protection measures is appropriate - as an unnecessary, costly, but inevitable obligation. However, in fact, a well-thought-out approach to labor protection issues can bring significant economic benefits to the employer, and at the same time, insufficient attention to safety issues ultimately leads to significant financial losses for the enterprise.

Indeed, the neglect of labor protection results in unsatisfactory working conditions and, as a result, a high level of occupational diseases and frequent cases of occupational injuries. Accordingly, the employer incurs additional financial costs, both direct (various payments and compensations to victims, fines for violation of labor protection requirements, etc.) and indirect (forced equipment downtime, reduced labor productivity, expenses for additional training of employees and etc.). Although Uzbekistan keeps a statistical record of costs associated with various types of payments to victims of industrial accidents or occupational diseases, it is not possible to find information on the percentage of such costs to other labor protection costs in the open press. But there is some information about another form of costs associated with labor protection - compensation for work in harmful conditions. For a number of reasons, this type of cost is worth considering in more detail.

As noted above, the Constitution and the Labor Code of the Republic of Uzbekistan and some other legislative documents explicitly state the employee's right to work in safe conditions and the obligation of the employer to provide such working conditions. However, at the same time, the law provides, if it is not possible for the employer to provide safe working conditions, to provide the employee with various types of compensation for work with harmful and dangerous production factors. Many high-level experts consider the existence of such a mechanism of benefits and compensations a relic of a planned economy, which impedes the process of improving working conditions. Indeed, at present, the practice of applying various types of compensation for work in harmful working conditions is widespread, as it suits both employers (there is no need to carry out technically difficult measures to improve working conditions) and workers (who consider compensation as additional income). The logical question arises: is it not better to direct these funds to the formation of normal working conditions, and not continue to support harmful production, and even constantly spend money to compensate for its consequences? But, most likely, without significant changes in the field of labor legislation, big changes in the current state of affairs should not be expected.

At present, strengthening the economic analysis of all aspects of our society is required. Wherever possible, it is necessary to use production and scientific-technical potential, material and labor resources more efficiently.

The funds that our state allocates to improve working conditions, develop and implement measures to reduce occupational injuries and occupational morbidity, in addition to the social effect, also have economic results, expressed in an increase in the period of professional activity of workers; labor productivity growth; reduction of losses associated with injuries, professional and production-related morbidity; staff turnover reduction; reduction of benefits and compensation costs.

The increase in the period of professional activity is due to the fact that the improvement of working conditions saves the health of a working person, prolongs life, and accordingly lengthens the period of his professional activity. Currently, this issue has become very urgent due to the lack of labor resources. Therefore, the use of the residual labor activity of senior citizens and disabled people is of great importance.

Unsatisfactory working conditions lead to the fact that a certain number of employees finish their labor activity before the retirement age or change their place of work. The lowest percentage of employment of persons of older age groups in industry, construction, road and rail transport, i.e. where there is the greatest shortage of labor.

Working conditions greatly affect the increase in labor productivity. Under favorable working conditions, human performance increases, since there is no need for the expenditure of energy to protect the body from the effects of dangerous and harmful production factors. In addition, the efficiency of the use of working time is increased by reducing the loss of working days caused by temporary disability of employees.

Improving working conditions and introducing measures to ensure its safety leads to a reduction in professional, production-related morbidity and industrial injuries, increases the effective fund of working time, thereby leading to a significant economic effect.

The indicators of economic efficiency include:

- reduction of losses associated with accidents, fires, disability due to injuries and morbidity;
- profit received as a result of an increase in labor productivity associated with the improvement of biomedical and technological conditions;
- reduction of losses due to a decrease in staff turnover due to improved working conditions;
- saving of raw materials, materials, energy during the operation of equipment used as collective protective equipment;
- reduction of costs associated with the provision of benefits and compensation for workers in harmful working conditions.

Improving working conditions reduces employee turnover. Another reserve for saving material resources associated with the improvement of working conditions is a reduction in the cost of benefits and compensation for workers in harmful conditions.

The state will spend enormous funds on the provision of benefits and compensations, which far exceed the costs of implementing measures to improve working conditions.

Understanding of these circumstances has led to a growing attention recently to the issue of quantifying the economic efficiency of labor protection measures.

One of the first methods for determining the economic efficiency of measures to improve working conditions was developed by O. A. Afonina and A. V. Kopylov. Using this technique, it was proposed to determine the economic effect of the implementation of measures to improve working conditions as the sum of self-supporting and social effects expressed in monetary terms. Self-supporting effect is accrued through indicators of increasing labor productivity or indicators of improving the use of production assets. The social effect of the introduction of measures to improve working conditions is defined as saving money on pensions and benefits, disability pay, etc., in connection with a reduction in the loss of working time due to illness, as well as a conditional saving on training staff in economy in connection with the increase of labor capacity of workers.

The economic effect is achieved due to:

- increasing labor productivity by increasing efficiency and reducing fatigue due to improved working conditions;
- reduction of labor intensity of products due to reduction of unproductive labor costs at the workplace (unnecessary movements and efforts);
- an increase in the effective fund of working time due to the reduction of day-to-day losses caused by temporary disability due to work-related injuries, occupational and work-related diseases;
- increase the efficiency of use of equipment due to the reduction of intra-shift and full-day losses of working time.

The annual economic effect is determined by comparing the savings obtained with the costs of the implementation of measures.

The net economic effect indicator represents the difference between the economic results of the measures taken and the costs of their implementation, reduced to annual proportionality. It is calculated in all cases of economic justification of measures and is used to: justify the expected (calculated) effect of scientific and design decisions to improve working conditions and labor protection; selection of the most effective of two or more options for activities that differ in their impact on the performance of the working environment, as well as their social and economic results; economic evaluation of actually implemented measures, in particular in order to establish the size of material incentives for employees of enterprises, research and design organizations for work in the field of improving conditions and labor protection.

### **Conclusions**

An indicator of overall economic efficiency is the ratio of economic results to costs. It is calculated in all cases of the economic feasibility of measures and is used to establish the results of costs for improving conditions and labor protection; identify dynamics of cost-effectiveness; a comparative analysis of cost-effectiveness in various enterprises, in economic sectors and regions; comparing the expected (estimated) and actual cost-effectiveness with the approved standards.

In the form of a conclusion, we can say that for the economic justification of measures to improve the conditions and labor protection it is necessary:

- make a selection of source data on changes in the state of the working environment, achieved social results, technical and economic indicators of the enterprise (industry) according to the basic and implemented options;
- determine the costs of the implementation of measures;
- calculate the social and socio-economic efficiency of activities;
- calculate the full economic effect, i.e. economic results of activities;
- calculate indicators of net economic effect, overall and comparative efficiency.

### **References**

1. Life Safety: Textbook for universities / S.V. Belov, A.V. Ilnitskaya, A.F. Koziakov, etc. Under the general. Ed. S.V. Belova. 4th ed. - M.: Higher school. 2004. -- 606 p.
2. Life Safety: Textbook / Ed. prof. E.A. Arustamova. - 10th ed., Revised. and add. - M.: Publishing and trading corporation "Dashkov and Co.", 2006. - 476 p.
3. Glebova E.V. Industrial Sanitation and Occupational Health: A Textbook for High Schools. - M.: IKF "Catalog", 2003. - 344 p.