

TRAINING PROGRAM TO INCREASE THE RESISTANCE OF MEMBERS OF FIRE AND RESCUE SERVICES AT THE AIRPORT

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The content of the thesis is to clarify the issues of psychological and physical endurance at work of rescue and firefighting services and, therefore, create a training program to increase physical and mental endurance. The work is developed in addition to the main tasks and activities of rescue and firefighting services, also the topic of training that is required of a complete and without which they couldn't perform their job. The work also focuses on the actual mechanisms of increasing mental and physical endurance and much space is devoted to the topic of psychological resistance, familiarity with the very psychological services in the field of rescue and firefighting services and individual coping mechanisms. The aim was to design a training program through which members were able to cope better with the physical, but mostly mental stress.

K e y w o r d s: psychological resistance, physical resistance, training program, physical exhaustion, psychological care.

1 INTRODUCTON

It is well known that the work done by members of rescue and fire fighting service is among those professions that are most at risk above the threshold to stressful situations. It is difficult not only in terms of great physical stress, but also psychological. Mental health of firefighters is extremely important to carry out its activities and many situations in their work beyond normal human experience. Those are factors which more or less influence them. Therefore, the greater part of my thesis I devote just psychologically employees and way to overcome difficult situations, which are exposed.

In those circumstances, I set a goal and work to find ways that can increase physical and mental endurance while working firefighter.

2 THE PLACE AND ROLE OF RESCUE FIRE SERVICES AIRPORTS

Fire Rescue Service is carrying out activities in connection with the provision of assistance in cases where the risk to human life or the environment. To implement such a service is needed sufficient readiness of the corps and services in the field of technical security fire station.

One of the basic tasks of Fire and Rescue Services is providing life-saving aid and fire, road accidents and other emergencies. Saving lives involves a threat to people in the heights, in the field, where

members are difficult to access with the help of special technical equipment, the use of which must undergo basic training. Fire and Rescue Service carries out activities, including providing aid measures a person on site or removal of injured and providing assistance in emergency situations where escape life-threatening substances.

2.1 Place and organization of Fire Rescue Services

Rescue fire department is required to operate in cooperation with state authorities, municipalities, civic association. Involved in the implementation of activities in cooperation with international organizations and authorities located in other countries and under international treaties of Slovak Republic.

The Fire and Rescue Services consists of the Presidium of the services, Regional Headquarters Corps, Corps District Headquarters and fire and rescue department of the Slovak Republic Bratislava as a separate device services, services of facilities and workplaces Corps. Management activities carried out by the President. The Presidium is part of the Home Office, which is authorized to establish or disable a device church away from its seat. A management activity at the regional directorate performs a Director who is appointed by the Minister and removed.

3 INPUT PREPARATIONS OF FIRE FIGHTER SERVICES ON AIRPORT

3.1 Physical preparation of Fire Fighter Services on Airport

The main role of physical training of Fire and Rescue Services of airports is to create such conditions that the employees were able to carry out civil service, strengthen and increase physical fitness member, picking up the development of motor skills and abilities necessary to perform tasks in the church. Physical preparation is prepared so that it can ensure and fulfill the role of the members and not to limit or reduce its readiness and capacity for action. There must be conducted trainings throughout the year and is divided into the general and physical preparation.

3.2 Initial training and vocational training program of Fire Fighter Services

Training and preparation of Fire and Rescue Services at airports must be carried out by the Home Office no. 611 of the Fire Brigades and the principles of ICAO. Preparation of firefighters from performing their activities includes, inter alia teamwork. Members of preparation Fire and Rescue Services must be prepared so that they can appropriately carry out their activities. Fire and Rescue Services employees must be trained in such a way that they can effectively manage rescue and fire fighting vehicles and equipment appropriate use of total vehicles.

3.3 Types of training

The basic types of training include:

- Initial training,
- Basic training,
- On training,
- Specialized training,
- Cyclic training,
- Physical preparation.

4 PROFESSIONAL TRAINING PROGRAM FRS AT THE AIRPORT

The main functions and duties of rescue and fire fighting services at the airport is to save lives and provide assistance if necessary firefighting. Based on that system, which should provide security for aircraft and ground facilities are newer and more sophisticated, the number of fires at airports is reduced. On the other hand, it is more important to ensure regular attending the skills, training and education in their field, because each employee of FFS, must be prepared, trained and able to operate without the help of a supervisor for real action.

4.1 Basic training – theoretical part

The main task of theoretical training is to discipline the members, efficiency in carrying out activities together with other colleagues and peer helping you take responsibility for carrying out the activities, learn the ways and methods for carrying out rescue and fire fighting services, the ability to know the proper use of rescue and fire-fighting equipment and technical means of rescue and fire.

4.2 Basic training – practical part

The main role of the practical part of the basic training is the acquisition of habits to carry out rescue and fire fighting operations under conditions that produce stress, acquisition of resistance to psychological stress, which may be caused for example. Extreme temperature overlaid, toxins, poor visibility.

After completing this training, practical training corps member acquires physical readiness needed for dismantling design, creation and hose lines and work with techniques that the course of their activities are used to rescue people. Ability to enter into long-term focus and concentrate while watching the situation an emergency. Further work skills into the limited space inside the fuselage to the exclusion of traditional ways of movement and positions for work (motion crawl, work in the supine), gaining skills, independent work habits, which seeks to rescue people, animals and property and acquires the habit to deal with unexpected situations arising negatively to tackle the task.

4.3 Special training commanders changes

The main focus of specific training to all individual commanders the ability to know the professional way to assess the situation and be able to anticipate the changes. It focuses on the ability to think in a professional manner and ability to know to take in poor conditions good decisions. Head of changes must acquire skills appropriately influence in extreme moments on man, give it enough strength and confidence in our own strength and ability, the ability to quickly and correctly orient incurred in terms of art and to take responsibility for their decisions.

4.4 Operational tactical training

This training immediately following completion of basic training. The main task of the operational and tactical training is practice the deployment of rescue and fire fighting techniques together to service personnel in such a position so as to create conditions for the safe evacuate passengers by creating escape routes for the isolation of the airframe and its subsequent cooling and obtaining sufficient control over fire the possibility of further rescue work.

4.5 Fire tactical exercises

Based on the volume and frequency of training exercises are divided into:

- Partial exercise carried out once a year.
- Panel exercises that are carried out twice a year.
- Comprehensive exercises that are performed once every two years.

5 FORMS TO INCREASE PHYSICAL RESISTANCE OF MEMBERS FFS

In the case of rescue and fire fighting service can focus on measures of organizational perspective, whereas technical measures such treatment facility or appropriate climatic conditions in this case are impossible. Such measures may consist for example of good work and rest regime and the appropriate organization of work of a rescue and fire brigade.

5.1 Physical exhaustion

Natural and physical readiness of firefighters is extremely important. Members of the FRS through well prepared adapted to overload the body and are thus able to handle requests in an environment where the temperature and humidity is higher and perform rescue and firefighting activities. If there is a lack of readiness to fire consumed the adaptive reserves. Process in the example of overheating the body, is accompanied by rapid fatigue, which prevents the body. In the event that these symptoms a person inspects the work completed and can appear an increase in heart rate, shortness of breath to heat stroke and heat shock

5.2 Natural immunity or protection from exhaustion

The basic ways to prevent depletion is primarily endurance training (aerobic) and regular rest periods with drinking regimen, as well as proper nutrition and optimal body weight. When excessive stress is necessary to provide for the human body enough energy in the form of sugary foods, thus the short and in the form of liquids.

In carrying out rescue and fire fighting operations firefighters is important to monitor certain aspects in relation to their health. Monitors the level of deployment of corps members during prolonged action (like take turns, resting, and whether they show some signs of fatigue). Furthermore, monitors compliance with the implementation of rescue and fire fighting operations together with rest (the most ideal substitution after 6-8 hours). It is important to provide persons engaged in fire fighting and rescue work at the site where it could endanger their lives protective equipment and exercise professional supervision over them.

5.3 Protective equipment and other equipment from physical exhaustion.

For the basic protective equipment can be considered in the first place drinks and food. It is best to start drinking fluids before physical load, i.e. half to 1 liter of fluid administered regularly. During exercise is continued alone fluid intake as well and that regular doses of 0.2 liters to 0.3 liters

after 30 minutes of load in 5 to 10 minute break if possible during the intervention. After completion of the load should still be drinking regime and to 0.4 liters to 0.6 liters of fluid at 15-20 minute intervals.

6 FORMS AND METHODS OF INCREASE MENTAL RESILIENCE OF MEMBERS FFS

Work of firefighter is carrying out its activities, which is very demanding not only the physical sense but also the psychological. It is therefore very important that during the admission control were separated by eligible applicants from non-compliant. Firefighter profession may in fact be carried out only physically, but mainly mentally able-bodied individuals.

6.1 Mental exhaustion or fatigue syndrome

Activity is a way of doing business man (member of FRS), which is a burden for him. Load produces in man (member of FRS) response in the form of stress. Stress causes the human adaptation syndrome, i.e. the ability to adapt to the new body burdens. Adaptation is adjusting to the new burdens that come along with settlement is therefore adopting a new level of activity (use of reserves).

Where the process is the right way, it may cause psychological syndrome exhaustion, that the fatigue syndrome. It is therefore extremely important to acquire the ability to adapt to new situations of stress and avoid firefighter officer at the mental fatigue.

6.2 Stress response to a critical incident

Method of stress response to a critical event depends on the current state of psycho-physical being. Conditions can be compared with the battery charge status. However, a condition in humans and is not yet stable. Capacity increases with increased load and short time period to recharge. Batteries are times when a person experiencing the stress full and depletes the mental and consume energy due to various factors such as breakups, depression, and disease.

6.3 Mechanisms for coping

6.3.1 Resiliency

One of the ways of coping with difficult situations is resilience or resistance or resilience of man. Resiliency is a concept that was based on the long-term studies of children who grew up in highly adverse conditions, and although their development was not adversely affected. Professionals engaged in resiliency describe, as Antonovsky, what characteristics (e.g., adaptability, self-confidence ...) help a person cope with various life situations.

6.3.2 Salutogenesis and hardiness

Studies dealing with the impact of mitigating the negative stress stress moderators, mediating factors, and mitigating the negative damping effect. Hardiness is among internal resources, which give the most significant moderating effect. Hardiness-Personality-resistance or psychological hardiness is such a personality characteristic that allows ease to cushion the negative impact of adverse life events. The author of this concept is Kobasová, Maddi and Khan.

Hardiness is characterized by three personality traits: control (control events, cognitive control, and coping capacity), commitment (dedication, commitment, clarified values, meaningfulness of life) and challenge (challenge, good adaptability to change, and flexibility).

7 PROPOSALS FOR A TRAINING PROGRAM TO INCREASE PHYSICAL ENDURANCE OF MEMBERS FFS AT THE AIRPORT

In this chapter I would like to pay attention to the training simulator, whose presence is extremely important and is well known for their total inadequacy especially at airports.

Training simulator files are compiled into the system elements that allow simulating the real conditions of a fire in a confined space. It is systems that are composed of ordinary containers in which the unit may fire protection rehearse

tactics and led intervention in fires in terms of overall flare.

When extinguishing it requires special training firefighters, since it is a quite different situation than that which occurs during fire outside. A fire in a confined space will burn oxygen and creates the impression that the fire subsided. However, in open spaces and poor penetration of oxygen to the effects of heat and toxic fumes fire very rapidly, at an interval of a few seconds, activates a rule, an explosion occurred. Nevertheless, the trainer secures some safety measures to prevent injury to the firefighters.

8 APPLICATION DESIGN MECHANISMS TO INCREASE MENTAL RESISTANCE OF MEMBERS FFS AT THE AIRPORT

The presence of a psychologist at the fire station is without a doubt extremely important, in my opinion, is even more important was that, if necessary, to reach and able to provide immediate intervention. Perhaps the idea of the presence of a psychologist in a place where there is great danger unacceptable, but mental as well as physical health, of course, the corps is all the more important. Thus, it is also unacceptable mental breakdown firefighter-paramedic which determines the safeguarding of human life.

8.1 Applying posttraumatic intervention through debriefing and defusing during and after intervention

Debriefing is one of the most effective forms of prevention of burnout. It is recommended that led him to a psychologist or a doctor. It can also lead to other professionals if they are trained in crisis-intervention techniques and even those who did not undergo any training, but is expected to have experience of his own, including emergency fire service.

Defusing the release or spontaneous conversation and private chatting to difficulties for survival or emergency situation and events with someone whom I respect (friend, colleague, family member), which is primarily about reducing the resulting affective and emotional tension, gain understanding.

9 CONCLUSION

By my thesis, I wanted to contribute to the problems of coping with physical and mental stress at work in rescue and fire fighting services through basic and advanced vocational training and also suggest ways to improve mental and physical endurance at FRS creation of a training program.

More space I will devote themselves carrying out rescue and fire fighting operations on the mental health of members of FRS. I stressed the issue of appropriate psychological care, which in my opinion is not given enough space, despite its importance at work FRS is obvious.

It is also appropriate to focus more on the opinions and suggestions of their own rescue and fire fighting services. Find out how they perceive their work from a psychological point of view, or have experience with stressful situations, which could not meet. Focus on the ways previous address difficult situations and whether they think that if they had enough knowledge, aware of the ways of coping with psychological stress, would be able to use this knowledge in practice.

I therefore propose to do research using questionnaires or interviews to determine the extent coping with members of FRS and actual survey of the various forms used during exercise.

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