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PSYCHOLOGICAL RESOURCES AIR FORCE PILOTS USE FOR SELF-REGULATION

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Abstract. This article contains the results of theoretical and empirical analysis of the psychological resources of air force pilots. It presents a model of psychological resources for self-regulation, the components of which are resilience, moral and ethical responsibility, flexibility, reflexivity, tolerance or intolerance for ambiguity, and mental health as a complex of personal resources such as autonomy, competency, personal growth, a positive attitude to others, life goals, and self-reliance.

Keywords: professional activity of air force pilots, stresses in professional activity, psychological resources for self-regulation.

1. Introduction

In recent years, scientific and practical interest in questions connected with the reliability and efficiency of the professional activities of specialists who work in difficult and stressful conditions has significantly increased (Bodrov 2006; Matveev 1966; Yena 2001). Professional reliability and efficiency are the main indices of readiness to carry out certain professional tasks that are important in aviation (Kravchuk, Kalnysh 2011).

2. Analysis of recent research and publications

In this article, attention is focused on a person's activity in particular circumstances, when various extreme stress factors influence a person. These stress factors are connected with danger, a new operational environment, difficulties, responsibility, lack of information, possibility of injury, threat to life, and so forth. According to one author (Bodrov 2006), the reliability of the activity of specialists in extreme professions is provided by psychological stability, which is understood as constancy of mental processes and behaviour during various types of professional activities according to the degree of psychological tension (Myronec 2011). The authors also assume that first of all, this constancy depends on the ability to control personal activity, taking into account the dynamics of the psychological states that can develop. It concerns the accuracy and efficiency of the work performed. These problems were the focus of research of a well-known Russian school of scientific thought (K. Abulkhanova-Slavska, O. Leontyev, L. Dikaya, O. Prokhorov, M. Kuligina, O. Kopina, G. Prigon, M. Borishevsky, O. Konopkin, V. Morosanova, A. Osnitsky, and T. Kirichenko), who investigated the psychological specifics of professional activities.

3. Definition of problem

The study of the self-regulation of air force pilots during activity under extreme conditions will make a significant contribution to the advancement of research about the activity of specialists under the influence of extreme environmental factors (Kravchuk, Kalnysh 2011). It will help to contribute to the psychological readiness of air force pilots for satisfactory performance of tasks.

As mentioned in the title of this paper, the psychological resources military pilots use for self-regulation can be identified. The research is based on a step-by-step approach.

1) To find out the peculiarities of the professional activity of air force pilots and to analyse contemporary theoretical views and methodological approaches to conceptual definitions of *self-regulation for professional activity* and *psychological resources for self-regulation of professional activity*.
2) To deduce the psychological measures air force pilots us for self-regulation.
3) To reveal the personal characteristics that are psychological resources for the self-regulation of air force pilots.
4) To define the psychological resources air force pilots use for self-regulation.

Therefore, the self-regulation of a person during activity under extreme conditions is the object of our research, and the psychological resources that air force pilots use for self-regulation are the subject of this research.

4. Summary of the main research

As a result of the theoretical research performed, it was determined that the professional reliability and the efficiency of the activity of air force pilots are provided by several main factors. These factors are the following: discipline, responsibility, capacity to withstand emotional pressure, ability to organise personal activity under an intensive flow of information and a variety of tasks, capacity to get mobilised in a difficult situation, preservation of supplemental awareness, motivation, ability to predict situations, self-respect, and positive thinking about flight performance. We have therefore come to the conclusion that military pilots are able to effectively fulfil their tasks because of their capacity to self-regulate their behaviour in extreme environmental conditions (Kalnysh 2008; Kolesuk 2009).

An analysis of contemporary theoretical views and methodological approaches to the conceptual definition of *self-regulation for professional activity* and *psychological resources for self-regulation of professional activity* has been performed. On the basis of the analysis performed, we have come to the conclusion that there are some main principles of self-regulation during professional activity under extreme conditions (Myronec 2011; Voloshyn 2006). These main principles are the maintenance of stability, self-preservation, adaptation to environmental conditions (Leontyev 2010), achievement of a defined mental state, emotional stability, confidence in person traits, personal knowledge and skills, motivation, conscious or voluntary subservience of personal actions and behaviour to moral requirements, supraliminal self-regulation of personal activity, support of productive mass action, and a positive self-concept. As a rule, the search for psychological resources and reliance on these resources are the key components for self-regulation under extreme conditions. The content of psychological resources can include individual peculiarities that influence the adaptation and realisation of stressful situations, as well as the prevention of negative consequences (Vashenko 2011).

The psychological measures that air force pilots employ for self-regulation were identified as a result of the empirical research performed. Participants in the research are characterised by the ability to plan their personal activities and to determine the main targets to achieve the goals. However, these plans and activities are not realised independently, but with special help. And that is the point where dependence on the thoughts and evaluations of surrounding people and the ability to uncritically follow advice or information are very important.

The indices of personal characteristics that serve as psychological resources for the self-regulation of air force pilots are constituted in a pattern characterised by robust beliefs, moderate expression of moral and ethical responsibility, and mental constriction. Accordingly, it shows that mobility has an average level of developmental growth. It is known that air force pilots have low indices of psychological resources such as personal growth and life goals (Matveev 1966). Individuals can experience the effects of ingenerate stagnation, they can have no personal growth over time, and they can have no interest in personal activity and no targets in their life. Those possessing this pattern are characterised by the existence of close, trusting relationships with others, by the capacity to find compromises in a relationship, by a sense of confidence and competence during the regulation of personal affairs, by the maintenance of a positive attitude about oneself, and by the acceptance of positive and negative experiences. We also succeed in highlighting distinctive features of age factor. The 25-year-old interviewees cannot stand public pressure in their cogitations and acts; they orientate while making critical decisions. And these features are not internal for 35–55-year-old interviewees. The interviewees can be divided equally into medium and low developmental levels of reflexivity, and a high level of development of that personal trait is not evident.

The psychological resources involved in the self-regulation of air force pilots are defined by regressive analysis. There are personal traits such as reflexivity, involvement, and risk acceptance as the components of resilience, life goals, autonomy and personal growth intolerance for ambiguity, and flexibility as a component of moral and ethical responsibility. The feedback effect on self-regulation of adjusting constriction testifies to this.

5. Conclusions

To sum up the work performed, it should be noted that self-regulation is an essential condition for the normal mental activity of specialists. It sufficiently defines the performance capacity, mind, well-being, and health of a specialist. That is why aviation psychologists have been searching for ways of coping with the negative consequences of professional activities. One of the ways is the determination of the optimal psychological resources for the purpose of preserving the mental health of pilots, taking into account the conditions of their activities in order to ensure the readiness of air force pilots for professional training and military operations, predicting the idiosyncrasies of air force pilots during activities in extreme conditions, and creating programmes of psychological aid for these specialists according to the features of the self-regulation of behaviour in extreme conditions.

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