



Article

Theoretical and Practical Aspects of Using Autogenic Exercises in Military Service Activities

Reyimbayev Zair¹

1. Independent Researcher at the National University of Uzbekistan

* Correspondence: -

Abstract. This study examines the theoretical and practical effectiveness of autogenic exercises in improving the psycho-emotional state of military personnel and reducing anxiety and stress levels. The empirical study involved 150 military personnel aged 20–35 years, who were divided into a control group of 100 participants and an experimental group of 50 participants. The experimental group participated in an eight-week autogenic exercise program conducted three times a week for 20–30 minutes per session. The State-Trait Anxiety Inventory developed by C. D. Spielberger and adapted by Yu. L. Hanin was used to assess reactive and personal anxiety. The results demonstrated a statistically significant reduction in anxiety levels among participants who completed the autogenic exercise program ($p < 0.001$). Reactive anxiety decreased from 47.3 ± 5.9 to 36.4 ± 5.2 points, while personal anxiety decreased from 46.5 ± 6.1 to 39.2 ± 5.5 points. The findings indicate that regular autogenic exercises contribute to emotional stabilization, stress reduction, improved concentration, and enhanced psychological self-regulation among military personnel. The study confirms the practical potential of autogenic exercises as an effective psychoregulatory method that can be incorporated into military psychological training programs.

Keywords: autogenic exercises, military psychology, military personnel, anxiety, stress, psycho-emotional state, psychological self-regulation, emotional stability.

Citation: Zair R. Theoretical and Practical Aspects of Using Autogenic Exercises in Military Service Activities. Central Asian Journal of Literature, Philosophy, and Culture 2026, 7(4), 100-105.

Received: 10th Jul 2026
Revised: 11th Aug 2026
Accepted: 10th Sep 2026
Published: 06th Okt 2026



Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>)

INTRODUCTION

Modern military service activity high at the level psychologist and physical downloads with is described . Military servants permanent in a way high responsibility, time scarcity , danger factors and uncertainty under the circumstances activity take They go . This and their psycho-emotional to the state negative impact show , stress and anxiety level to increase reason to be possible [1]. Such situations cannot but have a military effect on the health of military personnel and the efficiency of their service.

Ensuring the psychological stability of military personnel is one of the important factors determining the combat potential of any unit. In this context, the introduction of psychological technologies aimed at managing mental stress and reducing the effects of stress is of urgent importance [2].

Among the methods of psychological self-control, autogenic training occupies a special place. This method was developed in the 1930s by the German psychiatrist Johann Heinrich Schulz and allows you to control your internal psychophysiological state [3]. Autogenic training helps to achieve muscle relaxation, breathing control, concentration, and emotional stabilization.

In recent years, a number of studies have been conducted on the use of autogenic training in the activities of athletes, rescuers, law enforcement officers, and military

personnel [4]. Studies have shown that this method helps reduce stress levels, increase concentration, and increase performance [5].

At the same time, there is a lack of comprehensive studies on the impact of autogenic training on anxiety levels among military personnel. In particular, assessing the effectiveness of this method in the conditions of national military education and service in the Armed Forces of our country is of great scientific and practical importance.

The purpose of this study is to study the effect of autogenic exercises on the level of anxiety in military personnel and to develop scientifically based recommendations for their introduction into the process of military-psychological training[6].

As a research hypothesis, a scientific hypothesis was put forward that the regular use of autogenic exercises reduces the subjective and reactive anxiety scores of military personnel.

Taking this into account, the following research tasks were determined:

- autogenous of exercises theoretical the basics analysis to do;
- military in the servants anxiety level to determine ;
- autogenous of exercises anxiety indicators the effect assessment ;
- military service practice for practical recommendations work exit.

MATERIALS AND METHODS

Respondents involved in the study

The survey was conducted among 150 military personnel from the Higher School for Sergeants Training under the Ministry of Defense of the Republic of Uzbekistan, serving in various units. The respondents were aged 20-35 years and

had a total service experience of 1 to 10 years[7].

As a rule, research participants were divided into two groups:

- control group - 100 people ;
- experience group - 50 people .

These groups in formation of military service age , seniority and service activity types according to similarity provided.

Research What is the process ?

Research previous and based on the final diagnosis organization done quasi - experiment in the form and carried out in the following three stages increased, that is:

- the first stage - the level of anxiety of all respondents was assessed;
- the second stage, autogenic exercises were conducted with the experimental group based on an 8-week program;
- the third stage - repeated psychodiagnostic work was carried out on all respondents involved in empirical research and the results were compared.

In the study Ch.D. Spielberger-Y.L. Hanin's anxiety level test was used [8].

The methodology consists of the following two scales:

State Anxiety – assesses a person's current emotional state;

Trait Anxiety – determines the level of anxiety as a stable personal characteristic of a person.

Each scale consists of 20 questions, and the assessment

is made from 20 to 80 points[9].

20-30 points - low anxiety;

31-44 points – average anxiety;

A score of 45 and above is considered a high anxiety level.

Contents of autogenic exercise program

The military personnel in the experimental group were trained three times a week, each lasting 20-30 minutes. These training sessions were conducted mainly during independent training hours and at bedtime[10].

The autogenic exercise program developed for the study included the following steps:

muscle relaxation;
call for a feeling of heaviness;
evoke a feeling of warmth;
control of breathing rhythm;
feeling the heart rhythm;
concentration.

All exercises under the control of the head of training within strict regulations Done[11].

Occupation time , place and exists from the circumstances come out in case autogenous exercise in execution as follows body from the circumstances used :

sitting without ("izvoshchi " method);
half- reclined in position (armchair or on the couch) ;
in a lying position (bed, mattress).

RESULTS

Analysis of the initial diagnostic results of the military personnel participating in the study showed that there was no statistically significant difference in anxiety indicators between the control and experimental groups ($p>0.05$). This confirms that both groups had the same psycho-emotional state at the beginning of the study (Table 1)[12].

Table 1. Reactive and subjective anxiety scores at baseline (M $\pm$ SD)

Index	Control group (n=100)	Experience group (n=50)	t	p
Reactive anxiety	46.8 $\pm$ 6.2	47.3 $\pm$ 5.9	0.48	>0.05
Personal anxiety	45.9 $\pm$ 5.8	46.5 $\pm$ 6.1	0.57	>0.05

Table from the data apparently as research at the beginning every two in the group both anxiety level high to indicators owner was .

Experience group 8 weeks with during autogenous exercises from the past then of participants psychological condition again was evaluated and the following results were obtained (Table 2) .

Table 2. Experience in the group autogenous from exercises before and next indicators

Index	From exercises before	From exercises later	t	p
Reactive anxiety	47.3±5.9	36.4±5.2	10.24	<0.001
Personal anxiety	46.5±6.1	39.2±5.5	6.71	<0.001

To the results according to reactive anxiety indicator 10.9 points on average , personal anxiety indicator and by 7.3 points decreased .

This differences statistically high to the extent significant that was determined ($p < 0.001$).

Table 3. Control in the group changes

Index	First measurement	Second measurement	t	p
Reactive anxiety	46.8±6.2	45.7±6.0	1.11	>0.05
Personal anxiety	45.9±5.8	45.1±5.7	0.94	>0.05

Control in the group indicators a little decreased although , this changes are statistically significant owner absence observed .

Table 4. Research final intergroup comparison

Index	Control group	Experience group	t	p
Reactive anxiety	45.7±6.0	36.4±5.2	8.83	<0.001
Personal anxiety	45.1±5.7	39.2±5.5	5.94	<0.001

Analysis results research finally experience group in the participants anxiety level control to the group relatively noticeable that it was low showed .

Results analysis

Taken information autogenous of exercises military servants psycho-emotional to the state positive impact to show confirmed .

Experience group participants from training then :

peace of feeling increased ;

sleep of the quality improved ;

service tasks in execution your attention increased ;

emotional of stress decreased They emphasized .

This situation autogenous exercises autonomic nervous system activity standardization and to stress physiological answer reactions reduction with explained[14].

DISCUSSION

The findings of the study demonstrate that autogenic exercises can be considered an effective psychoregulatory method for reducing anxiety and improving the psycho-emotional condition of military personnel. The statistically significant reduction in both reactive and personal anxiety in the experimental group ($p < 0.001$) indicates that regular

practice of autogenic exercises may contribute not only to the management of immediate emotional tension but also to more stable changes in psychological self-regulation.

The reduction in reactive anxiety from 47.3 ± 5.9 to 36.4 ± 5.2 points represents a 23.0% decrease, whereas personal anxiety decreased from 46.5 ± 6.1 to 39.2 ± 5.5 points, corresponding to a 15.7% reduction. In contrast, the control group demonstrated only minor changes that were not statistically significant. This difference between the groups suggests that the observed improvement was associated primarily with participation in the autogenic exercise program rather than with the passage of time or repeated psychological assessment.

These findings are consistent with the conclusions reported in previous research on autogenic training. In particular, the meta-analysis by Stetter and Kupper demonstrated the effectiveness of autogenic training in reducing anxiety and stress-related symptoms. The present study extends these findings to the specific context of military service, where personnel are exposed to high levels of responsibility, time pressure, uncertainty, and potentially stressful situations.

The practical value of autogenic exercises is also reflected in the participants' reported improvements in emotional well-being, sleep quality, attention during service tasks, and reduction of emotional tension. These effects may be related to the systematic use of muscle relaxation, controlled breathing, concentration, and other components of the autogenic training program. Such exercises can therefore be particularly useful as part of psychological preparation before demanding service activities and during periods of increased psychological stress.

At the same time, the results should be interpreted in light of several limitations. The study was conducted at a single military institution, the sample size was limited, and physiological indicators such as heart rate and blood pressure were not assessed. Therefore, further research involving larger and more diverse samples, multiple military units, and objective physiological measurements would strengthen the evidence regarding the effectiveness of autogenic exercises.

Overall, the findings support the integration of autogenic exercises into the system of psychological training for military personnel. Their regular application may contribute to improved emotional stability, anxiety management, self-control, and psychological readiness for demanding service conditions. Future research should additionally examine the relationship between autogenic training, stress tolerance, cognitive functioning, and indicators of professional or combat performance.

CONCLUSION

Research results military in the servants autogenous exercises application psycho-emotional the situation of improvement effective from the means one that it is showed .

Ch.D. Spielberger - Yu.L. Hanin methodology according to taken results autogenous exercises under the influence of reactive and personal anxiety indicators statistically significant to the extent decrease confirmed ($p < 0.001$).

Experience reactive anxiety in the group indicator is 23.0%, personal anxiety indicator and decreased by 15.7% .

Taken results based on following to conclusions arrival possible :

autogenous exercises military of servants psycho-emotional the situation improves ;
anxiety and stress levels reduces ;

increases mental stability and self-control;

it is desirable to be integrated into the system of psychological training organized in units;

it is necessary to include special modules on autogenic exercises in training programs of military psychologists.

Based on the above, it is appropriate to develop methodical recommendations for the use of autogenous exercises in military educational institutions and units and to put this technology into practice.

REFERENCES:

- [1] K. Kh. Abdurakhmonov, *Fundamentals of Military Psychology*. Tashkent, Uzbekistan: Uzbekistan, 2020.
- [2] B. B. Karimov, *Psychology of Military Servants*. Tashkent, Uzbekistan: Science, 2021.
- [3] J. H. Schultz, *Das Autogene Training*. Stuttgart, Germany: Thieme, 1932.
- [4] W. Linden, "Autogenic training: A narrative and quantitative review," *Journal of Psychosomatic Research*, vol. 48, no. 3, pp. 275–289, 1994.
- [5] P. Lehrer and R. Woolfolk, *Principles and Practice of Stress Management*. New York, NY, USA: Guilford Press, 2021.
- [6] Yu. L. Khanin, *A Short Guide to the Application of Spielberger's Reactive and Personality Anxiety Scale*. Leningrad, Russia, 1976.
- [7] F. Stetter and S. Kupper, "Autogenic training: A meta-analysis of clinical outcome studies," *Applied Psychophysiology and Biofeedback*, vol. 27, no. 1, pp. 45–98, 2002, doi: 10.1023/A:1014576505223.
- [8] A. Bandura, *Self-Efficacy: The Exercise of Control*. New York, NY, USA: W. H. Freeman, 1997.
- [9] R. S. Lazarus and S. Folkman, *Stress, Appraisal, and Coping*. New York, NY, USA: Springer, 1984.
- [10] Yu. A. Alexandrovsky, *Borderline Mental Disorders*. Moscow, Russia, 2018.
- [11] V. A. Bodrov, *Psychology of Professional Activity*. Moscow, Russia, 2019.
- [12] A. B. Leonova, *Psychic Self-Regulation*. Moscow, Russia, 2020.
- [13] E. P. Ilyin, *Psychophysiology of Human States*. St. Petersburg, Russia, 2018.
- [14] A. G. Maklakov, *General Psychology*. St. Petersburg, Russia, 2021.
- [15] C. D. Spielberger, R. L. Gorsuch, R. E. Lushene, P. R. Vagg, and G. A. Jacobs, *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA, USA: Consulting Psychologists Press, 1983.