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The Scientific Research on motivation for learning as an important element of social and economic sciences in the context of the sphere of security and defense

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Abstract

This article gives a brief overview of a study conducted on motivation for learning as an important element of social and economic sciences in the context of the sphere of security and defense. The research is an important scientific work of the author and was developed in the period 2012-2018. At present, its results have been approved, considered appropriate and acceptable, and are applied at the National Military University in Bulgaria.

Keywords : learning, motivational salience, security, defense

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1. Introduction

This article gives a brief overview of a study conducted on motivation for learning as an important element of social and economic sciences in the context of the sphere of security and defense. The research is an important scientific work of the author and was developed in the period 2012-2018. At present, its results have been approved, considered appropriate and acceptable, and are applied at the National Military University in Bulgaria.

The idea that human beings are rational and human behavior is guided by reasons is one of the first to reflect motivational salience. Much of western philosophy, from which political and economic theories originate, is based on the idea that people are rational actors who always act in their own interest. Modern studies on this construct however refute the idea of “homo economicus” or perfect rationality in favor of bounded rationality and paying attention to limits of the rationality of economic agents. The statement for the presence of perfect rationality is increasingly being disputed by modern management theories about motivational salience, which view human behavior as more complex and nuanced.

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The study is structured into four main chapters. Chapter One "Genesis and Development of Research on Motivational Salience through the Prism of Human Cognitive Activity and Its Importance to National and International Security" examines the strategic security environment and the military education system; a motivational expression as motivated behaviour of the individual in the learning process; self-esteem and social learning as socio-cognitive models of building individual behaviour; motivation and satisfaction of human activity as determinants of motivational excellence and sets the foundations of the methodology for researching motivational salience in the learning process and its relationship with satisfaction.

Chapter Two "Experimental Study on Motivational Salience in the Learning Process and its Relationship with Satisfaction Using the Example of Students at the Vasil Levski National Military University, Veliko Tarnovo, Bulgaria" presents: the diagnostic and main stages of conducting a study on the motivational manifestation in the process training and its relationship with satisfaction, in which the analysis of the participants in the study and the distribution of military specializations and gender and comparison of the array of the general population with the main emphasis was carried out - conducted an experimental study on the motivational salience of cadets from the Vasil Levski National Military University.

Chapter Three "Experimental Study on Motivational Salience in the Learning Process and its Relationship with Satisfaction with the Participation of Control Groups Following the Example of Learners at the Vasil Levski National Military University in Veliko Tarnovo, Bulgaria" presents the surveyed control groups focus on conducting experimental research on motivational salience in the learning process and its relation to the satisfaction of the participation of control groups.

Chapter Four "Research on Motivational Salience and Satisfaction with Training in the Field of Security and Defense with the Inclusion of Some Higher Education Institutions in Europe" examines distributions of observed variables to conduct research on the motivational salience of learners and satisfaction from training at the Vasil Levski National Military University based on expert assessments and provide information on the research on the motivational salience in some European educational institutions in security and defense are based on expert opinions.

Motivational salience has been investigated as a result of a thorough preliminary theoretical study of the concepts and theories directly related to it, considering:

- Cognitive school.
- Behavioral school.
- Socio-cognitive direction.
- A socio-cultural direction.
- Direction for behavioral physiology.

In the course of the theoretical study, motivational theories have also been studied in terms of the content of the needs and the way of the motivation process. Fundamental content and procedural motivation theories are considered as follows: Content Motivational Theories, incl. Henry Murray's motivational taxonomy, Abraham Maslow's hierarchy of needs, Frederick Herzberg's two-factor theory of motivation, Atkinson's theory of achievement, ERG concept by Clayton Aderfer, David McClelland's theory of socially acquired needs, Paul Lawrence's and Noriya theory of the four impulses; and Procedural motivational theories, incl. Adams's theory of justice and social comparison, Edwin Locke's definition theory, the theory of the task's characteristics by Heckmann and Oldham, theory of expectation by Vrum, Porter and Lawler's complex motivation theory.



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The study consists of:

- Diagnostic stage of the study on motivational salience and satisfaction with training in the field of security and defense.
- Main stage of the study on motivational salience and satisfaction with training in security and defense.
- Final stage of conducting research on motivational salience.

2. Experimental study on motivational salience in the training process

The analysis of the results obtained from an experimental study on motivational salience in the training process and its relation with the satisfaction using the example of the learners at the Vasil Levski National Military University, Bulgaria has identified the following positive trends:

- Satisfaction with the choice of academic specialty and military specialization is significant.
- The study of specialized subjects and disciplines is considered an important stage in the professional development of learners as future military leaders.
- It is reported that coercive measures adversely affect the behavior and motivation of learners in the process of learning, and positive reinforcements in the form of material or moral awards and incentives have a positive effect on motivational salience.
- The strong positive influence of the military organizational culture was found, incl. values, norms, symbols, rules, and traditions, on the individual performance of learners.

At the same time, several problem areas were found. To build an academic atmosphere that supports the entire university education and the establishment and formation of cadets as future professionals and military leaders must take certain actions aimed at improving the motivational salience in the learning process by both the learners themselves and by academic and command staff.

First. Personal participation of learners during seminars and exercises and participation in the initiation of extra-curricular activities to develop the personal qualities and skills of learners should be enhanced. *Second.* The strictness of the program at the university should be used as a source of influence on students' academic achievements. *Third.* The "connection success of the training and presentation of the trainees during the training course" as a future professional expression to be validated. *Fourth.* To establish the relationship between results obtained - effort. *Fifth.* *Sixth.* Improve the material base; modernize the techniques and technologies used in the training, increase hours spent on general military training and hours spent on specialized disciplines. *Seven.* To update the teaching material taught and the methods of teaching used. *Eighth.* Build trust, co-operation, help, and mutual support between teachers, commanders, and learners. *Ninth.* Take measures to avoid subjective evaluation.

2.1. Comparison of the answers of cadets and students in an experimental study on motivational salience in the training process



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The empirical study found that the respondents' answers did not depend on the heterogeneity of the respondents, respectively the division of the target group of civilian students and cadets, and no significant differences were found in the responses between the first-time civilian students and the first-year cadets. There were no significant differences in the responses between the control groups and the studied groups of alumni cadets. They were found significant differences between the responses of grade levels cadets 2013/2014, 2014 /2015, 2015 /2016 compared with the data obtained from respondents from the last academic year studied, namely the class of 2016/2017.

The data from the chi-square analysis and the statistical significance of differences in the responses show:

- Comparison of the answers of cadets and students from the first training did not reveal statistically significant differences.
- When comparing the answers of cadets and students from the first year of study for the academic year 2013/2014 and the class 2013/2014, some of the questions reveal statistically significant differences.
- When comparing the answers of all alumni classes of cadets, their answers reveal statistically significant differences.

Positive trends.

1. There is a sufficient degree of satisfaction, from the choice of an academic specialty and the choice of military specialization / civic specialty for all respondents to the study, which decreases in the last 2016/2017 academic year surveyed when indifference and dissatisfaction are rising sharply.
2. The bachelor's degree studied in a particular specialty is considered to be an important stage in the professional development of the cadets.
3. The motivational reinforcements used have a high degree of motivational prominence demonstrated by the respondents.
4. Collectively negative reinforcement and disclaimer are rejected as a method of sanction leading to positive learning outcomes and daily military activity by all respondents except a control group of first-year students.
5. It is believed that military and/or civilian training at the university prepares learners for future/military or civilian/leaders.

Negative Trends.

1. Strictness at university has a diminishing influence on academic performance for all respondents.
2. The learning outcomes are not considered to be related to the intellectual effort made by all respondents to the study.
3. Levels of personal involvement and initiative during seminars/exercises and levels of initiation of activities related to vocational and academic preparation are insufficient; there is indifference to such initiatives.
4. The time provided for general and special military / civic training for all respondents is considered insufficient by the learners.



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Experts' assessments on the problems in the training and motivation of the learners at educational institutions in the sphere of security and defense

At the final stage of the survey, conducted in the period 2017-2018, a study of the organizational culture and the problems in the training and motivation of the learners at the National Military University and in foreign educational institutions in the sphere of security and defense is performed. Experts with a major academic and/or commanding experience from Bulgaria and abroad are attracted to the experts. Experts were asked to provide feedback in six consecutive modules:

- Module One. Presentation of learners in the training process.
- Module two. Methods used to motivate learners.
- Module third. General satisfaction of the trainees in the specific institution.
- Module Fourth. Organizational culture.
- Module Five. Problems in academic practice when working with learners.
- Module Six. Opportunities for increasing the motivation and academic achievement of the learners.

Expert assessments are provided by educational institutions from Austria, Belgium, Bulgaria, Estonia, Spain, Lithuania, Poland, Portugal, Romania, Slovakia, the Netherlands, the Czech Republic, Sweden, Switzerland providing education and training in the field of security and defense. The research is scientifically supported by:

1. National Military University, Bulgaria;
2. Military University of Technology, Poland;
3. Theresian-Military Academy, Austria;
4. University of Public and Individual Security, Poland;
5. Armed Forces Academy, Slovakia;
6. Carol I National Defense University, Romania;
7. Netherlands Defense Academy, Netherlands;
8. War Studies University , Poland;
9. Swiss Military Academy, Zurich , Switzerland;
10. Military Academy of Portugal, Portugal;
11. University of Defense , Czech Republic , Brno;
12. Koninklijke Militaire School , Belgium;
13. Spanish Army Military Academy, Spain;
14. Nicolae Balcescu Land Forces Academy, Romania;
15. Swedish Defense University, Sweden;
16. Cuiavian University in Wloclawek , Poland;
17. Estonian National Defense College, Estonia;
18. University of Mykolas Romeris, Lithuania;
19. Major-general Vasile Roman, Romania.

In this part are outlined some of the problems identified and proposed possible solutions to improve the state of motivational salience among cadets of higher education institutions in the field of security and defense in Europe.



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3. Important results and contributions:

- The existing knowledge and skills in the theory and practice of motivation and motivational expression are enriched. The essence of motivational salience has been analyzed and its significance has been clarified in the context of national and international security, as well as being a precursor and imperative for successful training and education in the field of security and defense.

- A new approach to the management of motivational salience in the context of national and international security is proposed as the basis of modern security knowledge. It assures the continuity and the natural evolutionary transition from basic, fundamental research in science and practice to the modernization of approaches, innovation in the proposed object and subject of the research aimed at building new abilities and practical results from them.

- A scientifically-based methodology for conducting an empirical study on motivational salience in the training process and its relation to the satisfaction of the training according to the specifics of the object and the subject of the research has been established.

- An empirical study on the motivational performance of trainees in the "Organization and management of military formations at the tactical level" specialty, Land Forces Faculty, Vasil Levski National Military University was organized, scientifically grounded, and implemented with subsequent analysis of the results of the empirical study, identification of major problem areas, possible solutions identified, recommendations formulated to improve the students' motivation, activities, and events for improvement are made.

- Research on motivational salience in higher education institutions in the field of security and defense in Europe has been organized, scientifically grounded, and implemented, the results have been analyzed, the main problem areas identified, possible solutions identified and recommendations formulated based on which the need to build a common scientific and expert platform formed by experts in the field of security and defense education from different educational institutions and different countries.

- The results of the scientific researches unquestionably prove the established scientific research that the academic performance of the learners and the satisfaction they receive from their training during their academic preparation depends on the quality and the intensity of the application of their efforts and the methods of external motivation by the academic and command staff, which forms and determines a certain motivational expression in the form of a particular individual behavior.

- A coherent system of generalizations and suggestions on the problems of motivation and motivational salience in the field of education and training was created, as a result of the study of the real state and dynamics of motivational expression in the environment of education and training in the field of security and defense, and it was substantiated the need to develop the educational capacity of human resources as a precursor to national and international security.

The development of the study is characterized by a high degree of innovation, and for the first time in Bulgarian science attention is paid not only to the motivation for training in the field of security and defense but also to the subsequent motivational salience or the manifestation of individual behavior motivated by various instruments, means inherent in both internal and external motivation. An important point to be highlighted is the scale of the study, which covers 19 educational institutions from 13 countries in the security and defense spheres in Europe. The development is of interest to the academic staff of the military universities and academies of Austria,



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Belgium, Bulgaria, Estonia, Spain, Lithuania, Poland, Portugal, Romania, Slovakia, the Netherlands, the Czech Republic, Sweden, Switzerland, and others.

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