
The Use of Models for the Diagnosis of Defence Potential in the Strategic Management of Activities by Civilians to Strengthen National Security

Submitted 05/03/21, 1st revision 28/03/21, 2nd revision 19/04/21, accepted 25/05/21

Ilona Urych¹

Abstract:

Purpose: This paper aims to analyze the use of models for the diagnosis of defense potential in the strategic management of civilian actions to strengthen national security and their applicability during the Covid-19 pandemic.

Design/Methodology/Approach: The research method used was a diagnostic survey, using both survey and interview techniques, and the research tools were a questionnaire and an interview questionnaire. A type of statistical analysis was used to process the collected data, namely segmentation and k-means analysis.

Findings: The empirical results show that analysis of the research results made it possible to distinguish such categories of defense potential of students of military classes as mobilization, social and individual potential. The article also indicates the possibilities and needs for using the civilians' described potential to strengthen national security, especially during the Covid-19 pandemic.

Practical Implications: Possible use of models to diagnose defense potential in processes strengthening national security during the Covid-19 pandemic.

Originality/value: Selected empirical data gathered using surveys carried out among civilians in Poland were used in the research. These were subjected to statistical analysis. The model created for the diagnosis of defense potential can be used in the strategic management of the activities of civilians to strengthen national security. This model can always be used, but because it does not require financial resources, it seems essential, especially during an economic crisis, such as during the Covid-19 pandemic.

Keywords: Diagnosis, management, defence potential, strategy, civilians, national security, security studies, pandemic, Covid-19, economic crisis.

JEL classification: C13, C22, C53, F31, G11.

Paper Type: Research study.

¹Prof. Faculty of National Security, War Studies University, Poland,
i.urych@akademia.mil.pl;

1. Introduction

The appearance of the pandemic in 2019 became one of the most significant challenges facing humanity in modern times (Szymański, Smuniewski, and Platek, 2020). Unfortunately, last year's experience shows that after the gradual unfreezing of global economies, demand for many services did not return to the pre-pandemic level (Bylen, 2020). However, the OECD Economic Outlook (2020) published in June 2020 suggests that the negative impact of the Covid-19 pandemic will cause the world economy to face similar challenges similar to those which affected many countries during the world wars. The severe failures in various dimensions of almost every country's economic functioning will be difficult to compensate for. This situation is provoking a search for low-budget solutions aimed at supporting the implementation of the state's activities in various areas, including, for example, strengthening its security.

This paper aims to analyze the use of models for the diagnosis of defense potential in the strategic management of the activities of civilians to strengthen national security and the possibility of their application during the Covid-19 pandemic. In other words, the article points to the prospects of using the existing defense capabilities of civilians in nearly every state for the non-military processes for the protection and development of the country. This diagnosis seems to be particularly important in the current epidemiological situation in many countries, where the main activities and financial resources are dedicated to the fight against the Covid-19 coronavirus.

In order for the state to take advantage of civilians' defense potential, it is necessary to identify this potential, and this can be done using the models for the diagnosis of this potential presented in this article. They were created based on the results of empirical research conducted among secondary school students in Poland and experts involved in defense education in Poland. The empirical research was based on the diagnostic survey method and two research techniques: questionnaires and interviews (Babbie, 2008). The survey was conducted among secondary school students enrolled in military classes in Poland (Urych, 2016). The research tool used was a scaling questionnaire. Expert interviews were conducted with theoreticians and practitioners who deal with security and defense issues in their professional work. The research tool used here was an interview questionnaire. The research conducted is located in interdisciplinary security sciences (Czupryński, 2020; Jemioło and Dawidczyk, 2008; Piwowarski, 2016).

2. Literature Review

The majority of countries in the world are currently in a problematic epidemiological situation caused by the spread of the Covid-19 virus. This has increased the number of people hospitalized and deaths that have far exceeded the capacity of the healthcare systems of many states (Szymański, Smuniewski, and Platek, 2020). In many countries, there has been a slowdown in the economy,

economic stability has been threatened, unemployment has increased dynamically (Kozicki and Górnikiewicz, 2020; Grima *et al.*, 2020), and international supply chains have been disrupted, which has harmed the logistics sector (Bylen, 2020; Khan *et al.*, 2020). It has become natural that there are travel restrictions and border controls and that trade, agriculture, production, the oil industry, tourism, aviation, and entertainment have all become more complex. The prognosis of this state of affairs is linked to the recession and financial collapse (Nicola *et al.*, 2020; Grima *et al.*, 2020). The pandemic has also brought many social effects, such as the violation of the legal conditions for the safety and protection of the population of many democratic countries (Kawalski, 2020), an adverse change in the population between 2019 and 2020 (Kozicki, Górnikiewicz and Walkowiak, 2020), numerous problems related to online education – from social exclusion associated with the lack of appropriate computer hardware to difficulties related to the verification of learning outcomes (Śląski, Grzelak and Rykała, 2020; Khan *et al.*, 2020).

It can be concluded from the example of the Covid-19 pandemic that the diversity and changeability of contemporary threats and the inability to adapt social capital to the dynamics of the development of the epidemiological situation mean that particular efforts should be made to prepare models which will diagnose the diverse potential of individual countries, especially those dominated by the pandemic so that this potential can be used. These expectations relate not only to health care or online education but also to the critical function of the state, namely defense.

Defense capability is the preparedness of society, of the armed forces, of administrative and economic bodies to defend the country in a situation of a military or non-military threat. In other words, defense aims to counteract all kinds of dangers to which a country may be exposed. Defense is implemented by taking the necessary measures to ensure the country's security and its citizens (Chodak, 2015). Waldemar Kitler (2011) pointed out that defense is "a particular form of activity of the state in the area of national security which determines the sustainability and survival of the state (its territory, sovereign power, and society) and its undisturbed development in the face of various (external and internal) challenges and threats to its security." Thus, the defense potential, i.e., the strength, efficiency, capabilities, and productivity of a country (Kaczorowski, 2009) in defense, is the overriding element of the national security system country. The defense potential supports the defense and protection of the state and the interests of its citizens (Wojnarowski, 2014; Zabłocki, 2013).

The defense potential of developed and developing countries resides primarily in the armed forces (Załęski, 2018). Looking at the example of Poland, it can be pointed out that the Armed Forces of the Republic of Poland – following Article 26 of the Constitution of the Republic of Poland (1997) – "serve to protect the independence of the state and the indivisibility of its territory and to ensure the security and inviolability of its borders." Other elements of this potential include the

foreign service (diplomacy) working for security, special military services, and the defense industry (Kitler, 2011; Nowak and Nowak, 2015).

The efforts of the armed forces of many countries are now directed towards fighting the epidemic. This is why it seems so important today to describe civilians and to what extent they can strengthen national security. Thus, during the Covid-19 pandemic, the use of models for the diagnosis of defense potential in the strategic management of the activities of civilians to strengthen national security seems particularly justified.

3. Empirical Results – The Model of the Defence Potential of Civilians

Empirical data were collected using the diagnostic survey method, using survey and interview techniques and research tools such as a questionnaire and an interview questionnaire. The survey was conducted with secondary school students enrolled in so-called military classes in Poland and interviews with experts in defense education in Poland. Statistical analyses of the empirical material, such as segmentation and k-means analysis, were carried out on data obtained from six dependent variables, which diagnosed the surveyed students in terms of their self-assessment of the results they have achieved in education and their extracurricular activities, their interest in aspects of everyday life, their level of identification with universal values, aspirations in life and the importance of designated dimensions of their lifestyle. Moreover, the results obtained were correlated with independent variables such as the gender and level of education, places of residence, and military traditions in the respondents' families.

Empirical research has made it possible to determine that students enrolled in military classes in Poland – that is, civilians – can increase defense and protection-related activities and those that strengthen national security. Their defense potential, therefore, characterizes civilians. The analysis of the results of the research also made it possible to identify three components of this potential:

- mobilisation potential,
- social potential,
- individual potential.

Furthermore, based on the analysis conducted, a detailed characterization of each of the components of the defense potential of civilians has been made, and the elements which make their diagnosis possible have been identified. Analysis of the research results demonstrated that each component of the defense potential of the students studied is thus composed of elements constituting it, defined and characterized based on segmentation. Therefore, the research results indicated that each of the components of the defense potential has its model. This model consists of fixed components, such as knowledge, skills, and attitudes, defined and characterized based on the research conducted, which in their details are particular to each of the components of the defense potential (Urych, 2019). Separation of the

elements constituting the components of defense potential and its fixed constituents, which in the given components of defense potential differences in terms of their detailed characteristics, are models that make it possible to identify the mobilization, social and individual potential. The method of diagnosis of these three elements of the defense potential comes down to a specific function of a set of interdependent factors, which should not, however, be treated in terms of mathematical formulas, but as one that indicates the constituent elements and the existence of a correlation between them.

4. Empirical Results – Diagnosis of the Model of the Defence Potential of Civilians

The results of the research made it possible to diagnose the model of the defence potential of civilians, which comes down to the methods of diagnosing three of its elements, namely:

- mobilisation potential,
- social potential,
- individual potential.

The mobilization potential of civilians in this study should be understood as the ability of citizens, predisposing them to defend their people and the country and maintain combat readiness, especially in times of a military threat (conventional and non-conventional), when national defense and security considerations so require. It is based on the aspects of their existence and aspirations in life that determine their lifestyle and their particular knowledge, skills, and attitudes. The diagnosis of the mobilization potential of civilians is therefore presented in the form of a specific function of a set of interdependent factors, which should not be regarded as a mathematical formula. The formula for the mobilization potential of civilians is as follows:

$$MP = f (AL + GL + K + S + A) \quad (1)$$

where: PM refers to the mobilisation potential of civilians, f – function, AL – aspirations in life of civilians, GL – their goals in life, K – their particular knowledge, S – their defined skills, A – their characteristic attitudes.

Among the elements that constitute the mobilization potential of civilians are aspirations and goals in life. The analysis of the research results demonstrates that such aspirations in life as recognition in the community, peace of mind in one's immediate surroundings, and comfortable living standards allow civilians to qualify as personnel resources for the officer's corps. Aspirations in life described as work and dedication to family, good behavior, family happiness, good grades in school, work and thriftiness, and health and fitness give grounds to think of the given students as the personnel anticipated to serve in the non-commissioned officer

corps. In turn, having goals in life to earn a secondary school diploma, find exciting work, and a military career may indicate a predisposition to serve as future command personnel. On the other hand, such goals in life as obtaining material possessions, high wages, a peaceful life, a large number of friends, gaining respect and social recognition, a life full of adventure tend to qualify military class students for service in lower personnel ranks.

The mobilization potential of civilians also consists of fixed constituents, such as knowledge, skills, and attitudes, defined and characterized based on surveys and expert interviews. These components are presented in detail as follows:

- knowledge: in the area of combat training and emergency response;
- skills: in the elements of military training, teamwork, and emergency response;
- attitudes: a desire to serve in the military, a desire to enter into service in uniform, civic-minded, pro-social, patriotic.

Thus, the analysis of the research conducted allows the conclusion that civilians who have the above-described aspirations and goals in life described and the knowledge, skills, and attitudes can be qualified for mobilization potential.

The social potential of civilians in this study should be understood as the ability of citizens, as individuals and as a group, to participate actively in social and economic life and the performance of civic duties, based on their achievements in school, extracurricular activities, and interests related to lifestyle, and on their specific knowledge, skills and attitudes. The diagnosis of the social potential of civilians is also presented in the form of a specific function of a set of interdependent factors, which should not be regarded as a mathematical formula. The pattern of the social potential of civilians is as follows:

$$SP = f(SA-EA + LS + K + S + A) \quad (2)$$

where: SP indicates the social potential of civilians, f – function, SA-EA – school achievements and extracurricular activities of civilians, LS – their lifestyle, K – their particular knowledge, S – their defined skills, A – their characteristic attitudes.

The elements constituting the social potential of civilians, defined and characterized based on segmentation, included achievements in school and extracurricular activities and the lifestyle of the students studied. Based on the research conducted, it can be stated that school achievements and extracurricular activities related to high achievement in the humanities, participation in sports and military extracurricular activities, membership in social and school organizations, leadership in social and school organizations, or interest in security and defense, indicate a predisposition of students for activities for the benefit of society and country. On the other hand, high academic achievement in the humanities and excellent behavior make it likely that students will be placed in the country's future intellectual and

economic elite and that participation in Catholic and artistic extracurricular activities will benefit the family. In turn, a lifestyle that revolves around family security, peace in the world, true friendship, happiness, and freedom provide the grounds for thinking of the pupils concerned as those who will take part in efforts to build and sustain civil society. A lifestyle linked to national security, local patriotism, a sense of achievement, and a love of country seems to indicate that personnel predisposed to joining command staff. A lifestyle oriented towards mature love, a prosperous life, and a sense of dignity predisposes civilians to act for the benefit of the family, while a lifestyle connected with the world of beauty and salvation predisposes civilians to social activities.

The social potential of civilians also consists of fixed constituents, such as knowledge, skills, and attitudes, defined and characterized based on surveys and interviews with experts. These components are presented in detail as follows:

- knowledge: general, regarding national consciousness, regarding shared social values and actions that support them;
- skills: active participation in social and cultural life, in the development of civil society and individual development;
- attitudes: civic-minded, pro-social, patriotic.

Therefore, the analysis of the research conducted allows the conclusion that civilians who have the above-described achievements in school, extracurricular activities, lifestyle, and knowledge, skills, and attitudes can be qualified as social potential.

The individual potential of civilians in this study should be understood as the individual personality traits, abilities, values, experience, and skills, which motivate citizens to work and pursue personal development, based on the interests that determine the lifestyle of the respondents as well as on their particular knowledge, skills, and attitudes. The diagnosis of the individual potential of civilians is also presented in the form of a specific function of a set of interdependent factors, which should not be regarded as a mathematical formula. The formula for the individual potential of the civilians is as follows:

$$IP = f (IDLS + K + S + A) \quad (3)$$

where: IP indicates the individual potential of civilians, f – function, IDLS – interests determining the lifestyle of civilians, K – their particular knowledge, S – their defined skills, A – their characteristic attitudes.

The elements constituting the individual potential of civilians, which were defined and characterized based on segmentation, included interests determining the lifestyle of the examined students. The analysis of the research results demonstrates that such interests of civilians as living in their own families, television, radio,

press, their country, patriotism, security, and defense predispose students to actions leading to a peaceful and undemanding life. On the one hand, interests related to health, physical fitness, and knowledge, and on the other to food, comfort, convenience, social life, and the Internet, qualify students to work for peace and comfort. In addition, an interest in alcoholic beverages, sexual experiences, commerce, business, creativity, or DIY can suggest working to satisfy their own needs and entertainment.

The individual potential of civilians also consists of fixed constituents, such as knowledge, skills, and attitudes, defined and characterized based on surveys and expert interviews. These components are presented in detail as follows:

- knowledge: general and in the area of individual development;
- skills: leadership activities, individual development, healthy lifestyle;
- attitudes: civic-minded, pro-social, active individual development.

On the basis of the research conducted, it can be stated that civilians who have the above-described interests related to lifestyle, as well as knowledge, skills and attitudes can be qualified as individual potential.

5. Summary and Concluding Comments

The models for the diagnosis of the defense potential of civilians presented in this article can be used in the strategic management of civilian activities for the strengthening of state security, which seems essential, especially during the Covid-19 pandemic. The research results also made it possible to define recommendations for more effective use of their mobilization, social and individual potential for defense, protection and strengthening national security, which is presented below.

1. Analysis of the expert statements indicates that the mobilization, social and individual potential of civilians could be more effectively achieved if there were synergies between the various circles and actors responsible for the education of young people. Therefore, there is a need for dialogue and cooperation between schools and the family and the military and local government.
2. In considerations about the broadly understood education of civilians, it is difficult not to refer directly to the educators themselves – teachers, educators, leaders. Respect for them, recognition of their authority, experience, knowledge, and skills is a significant factor in the effectiveness of this process. It would be suitable for teachers in the educational process to internalize the pro-social, civic-minded, and patriotic values of their students in order to use them for the common good. Such attitudes could be used in the current epidemiological situation of many countries in the world.
3. It also seems essential for teachers and parents to pay more attention to the socialization process to shaping patriotic attitudes among young citizens,

which can be done every day, not just in particular situations. At the same time, it seems essential for young people to develop respect for their cultural heritage, sense of regional identity, and involvement in the functioning of their local community, region, and their local and more excellent country. This can be achieved using charitable and voluntary activities or on behalf of the local community. Therefore, it would be worthwhile to include in educational programs content that would allow the social potential of civilians to grow more.

4. In-depth and comprehensive research into identifying the defense potential of civilians in quantitative and qualitative terms is also justified given the interest of the armed forces in actions to promote national security in situations of various non-military threats, such as the Covid-19 pandemic. It, therefore, seems appropriate to carry out further research, the results of which may serve to indicate the implications for the practical application of the capabilities of young citizens, which predispose them to defend people and the country and to maintain combat readiness, especially in times of non-military threats, during crisis management, and also when national defense and security considerations require it (mobilization potential), or for their active participation in social and economic life and the performance of civic duties (social potential).
5. Research seems justified on the personality traits, abilities, values, experiences, and skills that motivate citizens to work and pursue personal development (individual potential). This knowledge would be helpful to all circles responsible for motivating young people to make constructive plans for their future, but also for their current involvement, e.g., in charity or pro-social behavior.
6. Practical solutions for cooperation between the armed forces and civilians are also called for. It would be advisable to develop a comprehensive concept of cooperation between the Ministry of National Defence units and citizens with high defense potential, taking mutual needs and capabilities into account.
7. Preparing civilians for emergencies, such as the Covid-19 pandemic, is interdisciplinary, aimed at effective action and managing particular individuals under specific threats, which is why all kinds of disputes and scientific conferences are needed to address these critical issues.

The recommendations presented here for more effective use of the defense potential of civilians were addressed to practitioners responsible for national security and the scientific community. These recommendations indicate directions and areas of work that would be worth discussing. One may also recognize that they represent challenges that are often not easy to achieve fully but can undoubtedly be applied.

In concluding this study, it is worth stressing once again that, during the Covid-19 pandemic, the knowledge, skills, and values of certain groups of civilians, as indicated in the model, can be used almost without cost. It is also worth increasing

the likelihood of using the defense potential of civilians in every country using strategic management of their activities to strengthen national security. These actions seem to be particularly important during the Covid-19 pandemic.

References:

- Babbie, E. 2008. Podstawy badań społecznych. Warszawa, PWN.
- Bylen, S. 2020. Market of Logistic Services During the Covid-19 Pandemic. *European Research Studies Journal*, 23(3), 47-61. doi: 10.35808 / ersj / 1852.
- Constitution of the Republic of Poland of 2nd April 1997, as adopted by the National Assembly on 2 April 1997 and accepted by the nation in a constitutional referendum on 25 May 1997, signed by the President of the Republic of Poland on 16 July 1997, Art. 26, Section 1. 1997. *Journal of Laws*, 78, 483.
- Czupryński, A. 2020. The essence of security sciences. *Zeszyty Naukowe Szkoła Główna Służby Pożarniczej*. 73(1), 103-123. doi: [10.5604/01.3001.0014.0777](https://doi.org/10.5604/01.3001.0014.0777).
- Chodak, P. 2015. Leksykon bezpieczeństwa. Józefów, Wyd. Wyższej Szkoły Gospodarki Euroregionalnej.
- Grima, S., Dalli Gonzi, R., Thalassinou, I.E. 2020. The Impact of COVID-19 on Malta and its Economy and Sustainable Strategies. Available at SSRN: <https://ssrn.com/abstract=3644833>.
- Jemioło, T., Dawidczyk, A. 2008. Wprowadzenie do metodologii badań bezpieczeństwa. Warszawa, Akademia Obrony Narodowej.
- Kaczorowski, B. (ed.). 2009. Encyklopedia powszechna PWN. Vol. 22, PWN, Warszawa, PWN.
- Khan, S., Rabbani, R.M., Thalassinou, I.E., Atif, M. 2020. Corona Virus Pandemic Paving Ways to Next Generation of Learning and Teaching: Futuristic Cloud Based Educational Model. Available at SSRN: <https://ssrn.com/abstract=3669832>.
- Kitler, W. 2011. Bezpieczeństwo narodowe RP. Podstawowe kategorie. Uwarunkowania. System. Warszawa, Akademia Obrony Narodowej.
- Kowalski, W. 2020. Impact of Covid-19 Pandemic of the Legal Conditions of Safety and Security of Selected Countries. *European Research Studies Journal*, 23(3), 253-273. doi: 10.35808 / ersj / 1881.
- Kozicki, B., Górniewicz, M., Walkowiak, M. 2020. Correlation between the Dynamic of Changes in the Population of Selected European Societies and Level of European Regional Security in the Day of Covid-19. *European Research Studies Journal*, 23(3), 311-323. doi: 10.35808 / ersj / 1885.
- Kozicki, M., Górniewicz, M. 2020. Unemployment Rate in Poland and USA During Covid-19 Pandemic: A Case Study. *European Research Studies Journal*, 23(3), 187-200. doi: 10.35808 / ersj / 1861.
- Laidlaw, K.E.W., Foulsham, T., Kuhn, G., Kingstone, A. 2011. Potential social interactions are important to social attention. *PNAS*, 108(14), 5548-5553. doi: [10.1073/pnas.1017022108](https://doi.org/10.1073/pnas.1017022108).
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, Ch., Agha, M., Agha, R. 2020. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78, 185-193. doi: 10.1016/j.ijssu.2020.04.018.
- Nowak, E., Nowak, M. 2015. Zarys teorii bezpieczeństwa narodowego. Warszawa, Difin.
- OECD Economic Outlook. 2020. Database Inventory. Database documentation. Retrieved from: https://www.oecd.org/economy/outlook/Database_Inventory.pdf.

- Piwowarski, J. 2016. Nauki o bezpieczeństwie. Zagadnienia elementarne. Kraków, Wyższa Szkoła Bezpieczeństwa Publicznego i Indywidualnego Apeiron w Krakowie.
- Śląski, P., Grzelak, M., Rykała, M. 2020 Higher education – related problems during covid-19 pandemic. *European Research Studies Journal*, 23(3), 167-186. doi: 10.35808/ersj / 1860.
- Szymański, F.M., Smuniewski, C., Platek, A.E. 2020. Will the COVID-19 Pandemic Change National Security and Healthcare in the Spectrum of Cardiovascular Disease? *Current Problems in Cardiology*, 45(9), 1-9.
[doi:10.1016/j.cpcardiol.2020.100645](https://doi.org/10.1016/j.cpcardiol.2020.100645).
- Urych, I. 2016. Military class in Poland – experiences and perspectives. *Security and Defence Quarterly*, 2(11), 112-134.
- Urych, I. 2019. Potencjał obronny klas wojskowych. Teoretyczno-empiryczne aspekty kształcenia obronnego. Warszawa, Wydawnictwo Naukowe Akademii Sztuki Wojennej.
- Wojnarowski, J. 2014. Model podsystemu obronnego państwa w systemie bezpieczeństwa narodowego. In: *System Bezpieczeństwa Narodowego RP. Wybrane problemy*, W. Kitler, K. Drabik, I. Szostek (ed.). Warszawa, Akademia Obrony Narodowej.
- Zabłocki, E. 2013. Kategorie. Zagrożenia: system bezpieczeństwa narodowego. Warszawa, Wyższa Szkoła Informatyki, Zarządzania i Administracji w Warszawie.
- Załęski, K. 2018. Siły zbrojne. Teoria i praktyka funkcjonowania. Warszawa, Difin.