Jerzy Kojkoł, Mariola Szczepańska, Dominika Wyszyńska, Łukasz Wyszyński Akademia Marynarki Wojennej W Gdyni

# MILITARY HIGHER EDUCATION IN POLAND FROM THE PERSPECTIVE OF QUALITY ASSURANCE (ESG) IN THE EUROPEAN HIGHER EDUCATION AREA (EHEA)

### **ABSTRACT**

The article presents an assessment of the quality of education in selected universities in the context of: European conditions the quality of education, the Polish system of higher education and the functioning of the Polish Commission Accreditation. The authors have made the interpretation of empirical research carried out in the year 2016 in three military colleges and presented the conclusions of these studies.

# Key words:

Military higher education, European higher education area.

# **European determinants of education quality**

The process of European integration alters almost every manner in which EU countries function. The common market, shared currency for some of the member states, as well as the free movement of people, are only some of the symptoms brought about by these changes. Along with the progress of the European integration, some member states recognised that strengthening Europe is tied to the cooperation in terms of education, leading to the intel-

lectual, cultural, social, academic and technological growth addressing the needs of a competitive, globalising economy<sup>1</sup>.

At the start of the 20th century debate on higher education was by and large focused on the issue of quality in higher education: a result of education becoming a commodity available to a growing number of people from all social classes. Among the discussed issues were inadequate facilities at higher education institutions, as well as the imbalance in the teacher-student ratio, which made it impossible to develop a personalised approach and a master-disciple relationship. Authors mentioned the widespread lack of active teaching methods and teacher-focused curricula, not to mention the long education cycle and high dropout rate.

Greater consideration was given to the idea of increasing the autonomy of higher education centres, allowing them to better adjust to the changing socioeconomic surroundings. As a result, many countries established agencies responsible for assessing the quality of teaching and the directions for the development of higher education centres<sup>2</sup>.

Thus, work began on the concept of a knowledge-based Europe, which was to come to life in the form of the European Higher Education Area (EHEA), where university education could be recognised across countries through a mechanism of comparing it. This, along with promoting mobility and combining education with academic work and innovation, became the subject of work and discussion in the so-called Bologna Process. Even though the launch of the process, as its name suggests, is being associated with signing the Declaration of Bologna in June 1999, its main tenets were drafted in the Sorbonne Declaration of 1998.

The Sorbonne Declaration, signed by the ministers of France, Germany, Great Britain and Italy, aimed to harmonise the structure of higher education systems by means of recognising qualifications and improving the international transparency of study programs. Its aim was to increase mobility and improve employablity<sup>3</sup>. The process currently involves 47 countries united in their efforts to create a shared higher education area.

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<sup>&</sup>lt;sup>1</sup> See The Bologna Declaration of 19 June 1999: Joint declaration of the European Ministers of Education, p. 1.

<sup>&</sup>lt;sup>2</sup> See *Implementing and using quality assurance: strategy and practice*, European University Association, Brussels 2008, p. 5.

<sup>&</sup>lt;sup>3</sup> See the Sorbonne Joint Declaration. Joint declaration on harmonisation of the architecture of the European higher education system by the four Ministers in charge for France, Germany, Italy and the United Kingdom, Paris, the Sorbonne, 1998, p. 1; and The Bologna Declaration, op. cit., p. 1.

In spite of the fact that the ministers signing the Bologna Declaration in 1999 agreed to dedicate ten years to structuring the EHEA, in 2009 it has been established that work towards this goal will continue<sup>4</sup>. The Bologna Process played a pivotal role in the reforms of many European countries, bringing about numerous challenges relating to the quality of teaching. Apart from issues of quality in the narrow sense of institutional procedures, providing quality teaching can be considered key in terms of all aims of the Bologna Process. It rests on the assumption that the clarity of curricula will increase cooperation and competitiveness, as well as mobility and institutional good practice, thus improving teaching quality<sup>5</sup>.

In the course of integrating higher education schemes the discussion concerning their substantial quality gained in importance<sup>6</sup>. It included, among others, defining the concept of quality. The idea of providing quality at a desired level is associated in the English literature with William Edward Deming and Joseph Juran, who defined it in the context of customer relations in mid-twentieth century. In *Juran's Quality Handbook* Juran defines quality as those features of products which meet customer needs and thereby provide customer satisfaction, as well as freedom from deficiencies, flaws, failures and customer dissatisfaction<sup>7</sup>. Later, Lee Harvey and Diana Green associated the idea of quality with higher education. They grouped five interconnected theories of quality from the perspective of higher education based on: 1) being exceptional excellent, 2) perfection or consistency – flawlessness, 3) fitness for purpose, 4) value for money, 5) transformation – the qualitative change in the participant of the education process<sup>8</sup>.

For the purpose of the below work, we propose that quality be defined as the degree to which a product or service meets the expectations or targets set by the customer, and provides an undistorted pleasure over the time it is designed to last (this is considered here as the graduate's satisfaction with the skills acquired from the higher education institution)<sup>9</sup>.

<sup>&</sup>lt;sup>4</sup> See London Communiqué. Towards the European Higher Education Area: responding to challenges in a globalised world, pp. 4-9.

<sup>&</sup>lt;sup>5</sup> Cf. *Implementing and using quality...*, op. cit., p. 6.

<sup>&</sup>lt;sup>6</sup> See Focus on Higher Education in Europe 2010: the Impact of the Bologna Process. Education, Audiovisual and Culture Executive Agency (EACEA), Warsaw 2010, p. 24.

<sup>&</sup>lt;sup>7</sup> Quoted from L. Bollaert, A manual for internal quality assurance in higher education with a special focus on professional higher education, Brussels 2014, p. 17.

<sup>&</sup>lt;sup>8</sup> See L. Harvey, D. Green, *Defining quality*, "Assessment and evaluation in higher education," 1993, no. 18, pp. 9-34.

<sup>&</sup>lt;sup>9</sup> See op. cit., pp. 21-23.

Europe's effort to offer quality teaching was expressed by adopting the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) by the ministers of higher education from countries included in the Bologna Process. Signed in Bergen in May 2005, the document had been prepared by the European Association for Quality Assurance in Higher Education (ENQA)<sup>10</sup>. Ten years later, in Yerevan, along with the ministers' expectations, the structure and order of the standards were modified, making them more transparent in order to minimise the risk of alternative interpretations. The ESG [from 2015] also refer more unambiguously to the learning and teaching process in the section discussing internal quality assurance, as well as define the relation between quality assurance and other achievements of the Bologna Process taking effect after 2005<sup>11</sup>.

Standards... have a crucial meaning for quality management in European higher education institutions. They consist of three parts and provide recommendations on how to follow the process of internal (part I) and external (part II) quality assurance, as well as explain the functioning of accreditation committees (part III)<sup>12</sup>.

The *Standards* determine the quality assurance procedure for higher education institutions and accreditation committees, outlining their mutual relations and principles governing their work.

# Higher education in Poland: outlining the challenges

Higher education is a part of the educational policy of the majority of modern countries, including the Republic of Poland. Therefore, it seems important to inquire about the role it plays, or should play, in the country, or

<sup>&</sup>lt;sup>10</sup> ENQA represents organisations which deal with quality assurance in the European Higher Education Area member states. It promotes pan-European cooperation in the area of quality assurance in higher education, spreading information and expertise among both its members and other parties interested in developing and exchanging good practice, as well as promoting the European standard of quality assurance.

<sup>&</sup>lt;sup>11</sup> Quoted from notes on the 2015 Ministerial Conference and Fourth Bologna Policy Forum in Armenia, http://www.pka.edu.pl/2015/04/20/konferencja-poswiecona-eosw-warmenii-14-15-maja-2015-r/, [accessed on 11 December 2016].

<sup>&</sup>lt;sup>12</sup> See *Standards and Guidelines for Quality Assurance in the European Higher Education Area*, European Association for Quality Assurance in Higher Education, Helsinki 2005.

rather in the country's political programme<sup>13</sup>. Jabłońska and Wróbel propose the following reply: *The knowledge and skills acquired by graduates of higher education institutions allow them not only to follow an individual career path, but also comprise an important factor in building the potential of a country's economic development<sup>14</sup>. But is it enough to say that the higher education scheme, whose central parts are its own institutions, is merely supposed to shape the student's growth path and support the country's economic development? A wider perspective is offered by Drozdowicz, who refers to the Magna Charta Universitatum (Great Charter of European Universities)<sup>15</sup>, pointing to the tasks it sets in terms of shaping culture, bringing up younger generations, humans and nature co-existing in harmony, and the individual's service to the society as a whole in the broad sense<sup>16</sup>.* 

Reviewing just two perspectives on the role and tasks of higher education institutions exposes an enormous variety of areas where they should or are able to fulfil their mission. This leads to the conclusion that the discussion on the role of the higher education scheme of a country has many facets, and there might be many concepts of shaping the scheme itself.

Debates of this kind mainly occur in the academia, however, they fail to reflect on the objectives of the institutions offering higher education, which should actually be the starting point for any further consideration of the structure (law) and financing of the entire higher education sector. On the one hand, there are audible concerns coming from external stakeholders (mainly employers) who indicate that the content and form of higher education should match their needs. On the other hand, the dominant position of the sponsor of higher education in Poland, that is, the Ministry of Science and

<sup>&</sup>lt;sup>13</sup> Politics as reconciliation of the behaviours of interdependent societies with opposing interests, see M. Gulczyński, *Nauka o polityce [The art of politics]*, Druk, Warsaw 2007, pp. 9-13. Opłatek defines the politics of a state as [a]ny activity outlined by the decisive centre of a formalised social group, aimed at completing set goals by means of the defined measures, see K. Opłatek, Zagadnienia teorii prawa i teorii polityki [Issues in the theory of law and theory of politics], Polish Scientific Publishers, Warsaw 1986.

<sup>&</sup>lt;sup>14</sup> M. Jabłońska, I. Wróbel, *Elementy zarządzania jakością kształcenia w uczelni wyższej [The Elements of quality management in higher education institutions]*, www.humanistas.edu.pl [accessed on 10 March 2017], p. 21.

<sup>&</sup>lt;sup>15</sup> The document was announced after the meeting of the European university chancellors in Bologna on 18 September 1988.

<sup>&</sup>lt;sup>16</sup> Cf. Z. Drozdowicz, Excellentia Universitas – szkice o uniwersytecie [Excellentia Universitas – drafts on the university], Wydawnictwo Fundacja Harmonia, Poznań 1995, pp. 7-8.

Higher Education, dictates that teaching activities must remain within the financial capabilities of the state.

This article will not aim at answering the question of purpose of higher education in Poland, nor will it review its desired shape. The authors will focus on examining how the conditions and setting of the higher education scheme impact the functioning of the internal teaching quality assurance systems at Polish higher education institutions.

Bearing the above in mind, it is worth reviewing the elements which had shaped the higher education scheme in the past and will determine its future functioning. A strategic consequence was brought about by the massification of higher education institutions, that is, opening to a significantly larger number of students. This has led, as Grudnikowski and Lewandowski point out, to an increase in the number of Poles boasting higher education. In mid-1990s approximately 7% of Poles completed higher education, while in 2014 the number reached almost 15% <sup>17</sup>. The comparison is even more striking with regard to the number of students and the number of higher education institutions. In 1990, there were approximately 400 thousand students in Poland; in 2010, there were as many as two million. At the same time, the number of higher education institutions rose from 100 to 450, including 325 nonpublic centres<sup>18</sup>. The surge in the number of graduates was effected by, on the one hand, the opening of public institutions to a growing number of students, and, on the other hand, the appearance of non-public institutions in the higher education sector. All this was made possible by the Act of 12 September 1990 – Law on Higher Education. From the perspective of a quarter of a century, passing the Act seems to have brought about strictly quantitative changes. It appears to have been an adequate response to the social needs of the early 1990s<sup>19</sup> associated with switching from command to market economy and opening Poland to the Euro-Atlantic influence. At the same time Poland faced new challenges: 1) the infrastructure of higher education institutions was inadequate for the soaring number of students; 2) the demand for academic teachers increased rapidly; and 3) the concept of higher educa-

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<sup>17</sup> Cf. P. Grudnikowski, K. Lewandowski, *Pojęcie jakości ksztalcenia i uwarunkowania jej kwantyfikacji w uczelniach wyższych [The concept of teaching quality and its setting in higher education institutions]*, Gdańsk 2012, p. 397.

<sup>&</sup>lt;sup>18</sup> Cf. B. Macukow, Pojedynki z akredytacją i jakością – czyli jak mieć poczucie satysfakcji w kształceniu inżynierów [Against accreditation and quality – how to feel satisfaction from engineer training], p. 73.

<sup>&</sup>lt;sup>19</sup> Cf. P. Grudniowski, K. Lewandowski, op. cit., p. 398.

tion was marketised, that is, became subject to the principles of an open market.

Another factor determining the conditions and setting of the higher education scheme in Poland was the internationalisation of many aspects of the state's functioning. The mission statement of the Polish diplomacy: To serve Poland – to build Europe – to understand the world<sup>20</sup> meant that the country made or was forced to make the geopolitical decision to integrate with the European (European Union) and Trans-Atlantic structures (NATO). Furthermore, the internationalisation and standardisation some of the areas of higher education took place in the presence of the majority of countries of the Old Continent. This process caused a major impact on the direction of changes in the Polish higher education system, introducing, among others, the European Qualifications Framework, which allowed for the recognition of qualifications and increase in the mobility of students. The factor designed to support higher education institutions in their development and ensure a certain level of teaching and academic research (along with the outlines of the European Higher Education Area) was education quality. Its functional implications were reflected in the recommendation/obligation to introduce systems of education quality assurance.

# **Education quality in the Polish system of higher education**

Higher education quality assurance systems can be divided into two categories, depending on the area of focus. Firstly, internal systems operate inside the institution. Secondly, external systems support the quality of teaching from the level of national or international institutions<sup>21</sup>.

The main tenets of the internal dimension are set within national acts of law and regulations, and comply with the European conditions and documentation. An example of adapting the Polish higher education sector to the Bologna Process was passing the new *Act of 27 July 2005 – Law on Higher Education*. Higher education institutions were obliged to introduce an internal quality assurance system pursuant to the *Regulation of the Minister of Science and Higher Education of 12 July 2007* on the standards for various

<sup>&</sup>lt;sup>20</sup> The mission statement of the Polish diplomacy is posted on the official website of the Polish Ministry of Foreign Affairs, see www.msz.gov.pl [accessed on February 15th, 2017].

<sup>&</sup>lt;sup>21</sup> See L. Vlãsceanu, L. Grűnberg, D. Pãrle, *Quality Assurance and Accreditation:* A Glossary of Basic Terms and Definitions, Bucharest 2004.

fields and levels of education, as well as the procedure for creation and the conditions to be met by a higher education institution to provide interdisciplinary studies and macrospecialisations (Journal of Laws of 2007, no. 164, item 1166). However, higher education institutions have not been directly faced with new challenges in this field until the government passed the Act of 18 March 2011, which amended the Law on Higher Education, Law on Academic Degrees and Title and Degrees and Title in the Arts, as well amended some other acts of law (Journal of Laws of 2011, No. 84, item. 455). The major challenges included introducing an internal education quality assurance system which would cover actions aimed at improving the curricula for courses of study. The detailed procedure for the Act was included in art. 9, par. 1, item 9 of the Regulation of the Minister of Science and Higher Education of 5 October 2011 on the conditions of providing higher education on specific courses of study and the level of education in general (Journal of Laws, No. 243, item 1445). This regulation stated that one of the prerequisites for organising higher education was introducing a quality assurance system covering the mechanisms of improving the curriculum for the conducted courses of study. According to art. 11, item 1, the internal teaching quality assurance system should specifically include all manners of verifying the effects of teaching achieved by a student on each course of study in terms of knowledge, skills and social competence. It should also accommodate the student's assessment of the program, not to mention the implications coming from monitoring his or her career progress after graduation.

The higher education institution is bound to have a working (i.e., implemented) Internal Teaching Quality Assurance System, whose role gained importance with the new acts of law<sup>22</sup>. The institution should focus on a systematic approach to assessing and maintaining the quality of its: portfolio of courses, class structure, choice of teachers, technical and academic facilities, as well as matters relating to management and information flow. Unfortunately, as Lisiński points out, institutions frequently treat these recommendations in terms of formal requirements, not actual actions that they implement,

<sup>&</sup>lt;sup>22</sup> Cf. M. Lisiński, Wewnętrzne systemy zapewnienia jakości ksztalcenia w szkołach wyższych z perspektywy oceny Państwowej/Polskiej Komisji Akredytacyjnej w III kadencji [Internal teaching quality assurance systems in Polish higher education institutions viewed as an assessment of the 3rd term of the National/Polish Accreditation Committee], Działalność Państwowej Komisji Akredytacyjnej w latach 2008–2011 [The Work of the National/Polish Accreditation Committee in 2008–2011], p. 111.

which is reflected in the abundance of descriptions of the systems, but without substantial proof of it actually being in operation<sup>23</sup>.

### **Polish Accreditation Committee**

The Polish Accreditation Committee (PAC) is, according to law, responsible for external education quality assessment in Polish higher education institutions. PAC was established on 1 January 2002 (as the National Accreditation Committee), by means of the *Act of 20 July 2001* amending the existing *Law on Higher Education*. Its tasks and competences were redefined and broadened by the current *Act of 27 July 2005 – Law on Higher Education*. The Committee consists of experts assessing the condition of higher education and continuously carrying out work to improve the quality of teaching. It is mandatory for higher education centres to undergo PAC's evaluation. In case of a negative evaluation, the minister responsible for higher education may revoke or suspend the institution's right to provide teaching on a certain level or course of study.

The rights and responsibilities of PAC are set in the sixth chapter of the current Law on Higher Education. Both in art. 48a, item 1 of the Act and in art. 1, item 1 of PAC's statute, PAC is recognised as an independent institution whose main objective is to serve the quality of teaching. Polish Accreditation Committee's mission statement contains a more detailed review of its goals, which are: ...to observe fulfilment of standards agreed for higher education referring to best models adopted in European and global academic area as well as to support public and non-public higher education institutions in the process of enhancement of quality education and building of culture of quality. These activities aim to ensure that graduates of Polish higher education institutions rank high on the national and international labour markets, and to enhance the competitiveness of Polish higher education institutions as European organisations<sup>24</sup>.

Until 2016, PAC evaluated teaching quality in public and non-public higher education institutions through programme and institutional evaluation. The former assesses teaching quality in areas, levels and pro-

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<sup>&</sup>lt;sup>23</sup> Cf. op. cit., p. 115.

<sup>&</sup>lt;sup>24</sup> PAC's mission statement. See www.pka.edu.pl/en/mission-statement/ [accessed on 23 February 2018].

files of study. The latter, on the other hand, focuses on the internal teaching quality assurance system rather than on the curriculum (cf. programme evaluation). It looks into the functioning of basic units within the institution and the teaching quality on doctoral and postgraduate studies. Since 2016, PAC has been conducting programme evaluations only<sup>25</sup>. In the process of a programme evaluation the PAC's team needs to consider the following:

- 1) curricula, also from the perspective of the institution's mission and growth plan;
- 2) teaching standards as outlined in the regulations based on art. 9b and 9c of the *Law on Higher Education*;
- 3) qualifications of academic teachers and other people conducting classes with students:
- 4) cooperation with the socioeconomic surrounding of the teaching process;
- 5) efficiency of the internal teaching quality assurance system;
- 6) confirming the functioning of effective learning processes;
- 7) internationalisation of the teaching process;
- 8) accreditations and certificates issued by domestic and international institutions;
- 9) facilities used to reach the teaching objectives;
- 10) support offered to students in the study process<sup>26</sup>.

The results of programme and institutional evaluations are published in the online database on www.pka.edu.pl. They include evaluations conducted by PAC in military higher education institutions. It is noteworthy that since military institutions started teaching courses subject to the *Law on Higher Education*, all of its course programs regulated by the *Act* undergo evaluation by PAC.

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<sup>&</sup>lt;sup>25</sup> Moreover, PAC carries out its responsibilities resulting from art. 49, item 1 of the *Law on Higher Education*. These include, inter alia, assessing applications to launch a new course of study or open a new higher education institution, or a Polish branch of a foreign institution.

<sup>&</sup>lt;sup>26</sup> See art. 48a, item 3 of the *Law on higher education* (Journal of Laws, No. 164, item 1365).

# Research methodology

Taking into account the particulars of the subject of investigation and the research procedure, the study employed the following research methods:

- 1) observation:
- 2) diagnostic survey;
- 3) focused, in-depth individual interview;
- 4) statistical methods.

The study has incorporated well-known techniques of direct, indirect and participant observation (both overt and covert). An observation journal was used as a tool to categorise the observed facts, phenomena or incidents determined by stereotypes and bias exhibited by students of military higher education institutions. Special attention was devoted to the mood of the study participants (e.g., timidity, irritation, excitement, calm and composure), their interest in the researcher, behaviour during classes which became part of the study (friendly, kind, neutral, hostile, aggressive), and behavioural reactions to the specific situational elements (e.g., a pedagogical talk on tolerance or discrimination and a didactic discussion about the effects of excessive stereotyping and prejudice).

The main technique used in the study was, nonetheless, diagnostic survey in the understanding of Pilch and Bauman. According to them, the method ...is a way of collecting information about the structural and functional attributes and the dynamics of social phenomena, opinions and beliefs of selected groups, the intensity and directions of development of certain phenomena, as well as all other social occurrences not localised within an institution, yet carrying an educational meaning, basing on a carefully selected group representing the general population where the investigated phenomenon exists<sup>27</sup>.

The research hereby described was of a diagnostic nature in the understanding of Guziuk, who stated that any ... research of a diagnostic nature conducted in a social setting should include at least one of the elements listed below:

<sup>&</sup>lt;sup>27</sup> T. Pilch, T. Bauman, Zasady badań pedagogicznych. Strategie ilościowe i jakościowe [The principles of pedagogical research. Quantitative and qualitative approaches].

- a description of the studied state of affairs or social phenomenon (description);
- an explanation of the causes and conditions of the existing state of affairs or social phenomenon being investigated (explication);
- a forecast, or prediction of changes which may occur in the studied state of affairs or affect the social phenomenon (prediction);
- a recommendation for the preferred direction of change or corrective action for individuals from the selected population (the author's innovative element)<sup>28</sup>.

Conducting the research required using a surveying technique as proposed by Pilch and Bauman. According to them, a survey is a method of ...collecting data through filling in by the research participant, most often autonomously, special, usually highly standardised questionnaires in the presence or, more commonly, without the presence of the person conducting the research. Survey questions are always factual, specific and refer to a single problem. Usually they require a single choice out of a selection of all possible answers which are provided. The survey usually addresses a narrow issue or a broader issue broken down into several specific aspects. Thus, one looks for exact, categorised, unambiguous and comparable data concerning a single subject of interest. Due to its extensive degree of categorisation, the survey becomes the basic means of communication between the research staff and participants<sup>29</sup>.

A survey contains closed questions, that is, questions which offer alternative answers, disjunctive or conjunctive. Alternative questions, Łobocki concludes, allow for two possible answers: either "yes" or "no," at times allowing the respondent to mark "I don't know" or "I don't have an opinion about something"... Disjunctive questions are multiple choice questions which require the selection of one out of more than two given answer proposals... Conjunctive questions allow study participants to choose more than one answer from the given limited set of options<sup>30</sup>.

The survey often contains so-called half-open questions, which, according to Łobocki, ... apart from a choice from the provided alternatives also

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<sup>&</sup>lt;sup>28</sup> M. Guziuk, *Metody badań pedagogicznych [Methods of pedagogical research]*, [in:] *Encyklopedia pedagogiczna XXI wieku [The 21st Century's Pedagogical Encyclopaedia]*, (ed.) T. Pilch, Academic Publishing "Żak", Warsaw 2004, vol. III, p. 222.

<sup>&</sup>lt;sup>29</sup> T. Pilch, T. Bauman, op. cit., pp. 96-97.

<sup>&</sup>lt;sup>30</sup> M. Łobocki, Wprowadzenie do metodologii badań pedagogicznych [Introduction to pedagogical research methodology], Cracow 1999, p. 237.

[allow for] "other," that is, own (discretionary) answers. It is advisable to include filter questions, that is, ones that enable to screen participants who have nothing to say about the studied topic, as well as validity ("consistency") questions which make it possible to exclude participants providing misleading ("deceptive") answers<sup>31</sup>.

This kind of survey research inspired the creation of the survey used for the below study, which was addressed to the students of military higher education institutions. In the interpretation of results the authors used Okoń's idea of statistics, that is, a science ...dealing with methods of quantitative description of mass things and phenomena, as well as the quantitative associations between them. Collections of the things and phenomena are called statistical sets or populations, and drawing conclusions about them on the basis of examining their appropriate representation is known as statistical inference<sup>32</sup>.

This approach allowed for a statistical description, which, according to Sobczyk, ... refers just to the given general group or sample (not necessarily random), while statistical inference exists only when a study is representative (random sample) and its results are generalised to the entire population from which the study sample was taken. The possibility of generalising results from a random sample on the whole population creates a probability problem, which is the theoretical basis for statistical inference<sup>33</sup>.

# Education quality in military higher education institutions – results of the study

The time between the first and second World War saw the establishment of:

- Higher Military School summer of 1922 in Warsaw. According to a regulation of the Prime Minister, the school was considered a higher education institution;
- Naval Officers' School in Toruń October 1922 (Navy Cadets' School as of 1928);

M. Sobczyk, Statystyka [Statistics], Polish Scientific Publishers, Warsaw 2004, p. 30.

<sup>&</sup>lt;sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> W. Okoń, *Nowy słownik pedagogiczny [New pedagogical dictionary]*, Academic Publishing "Żak," Warsaw 2001, p. 368.

- Officers' Aviation School in Grudziądz November 1925;
- Higher School of Engineering in Warsaw year 1936 (since 1939 renamed to Military School of Engineering).

Military training on the academic level was also provided at the time at military faculties of the Warsaw Polytechnic (currently known as the Warsaw University of Technology) and Lviv Polytechnic. The only institution to remain in operation during World War II was the Navy Cadets' School, which was reactivated in Great Britain in 1939.

In 1967 all military and cadet schools were granted the status of higher education institutions (some also became academic institutions). The change affected altogether 45 cadet schools and 11 military academies operating in Poland between 1946 and 1967. Starting with 1968, the number of higher education centres and military academies began to decline. The tendency continued into the 1980s, with thirteen professional and three academic higher education institutions. The professional institutions, contrary to the academic ones, were separated from the national higher education scheme, which is why only the Warsaw University of Technology, Naval College (in 1987 renamed to Polish Naval Academy) and Political-Military Academy were allowed to grant professional titles recognised by civil authorities.

The Military Medical Academy of Łódź was dissolved in 2002. Since then the Polish military has been facing a shortage of doctors. Furthermore, as a result of the *Minister of National Defence's decision no. 105/MON of 22 April 2002* regarding the reorganisation of military higher education, three higher education institutions for cadets were merged into one: the Military Academy of Land Forces in Wrocław (MALF).

Currently there are five military higher education institutions in Poland: War Studies Academy (former National Defence University of Warsaw), Polish Naval Academy in Gdynia, Military University of Technology in Warsaw, Polish Air Force Academy in Dęblin and Military University of Land Forces in Wrocław. There are over 4220 people providing work and service for the military higher education centres, including 1670 academic teachers. Most of the above have research and teaching positions (63%). Out of the remaining group, 34% is on teaching-only posts, while 3% are focused solely on research. Professors and assistant professors comprise 21% of staff, and 42% of employees in teaching positions can boast a doctoral degree. Professors, assistant professors and teachers with doctoral degrees specialise in 12 areas of the academia. Most specialise in technical sciences (approximate-

ly 57%), 31% focus on arts and social sciences, while the remaining 12% are dedicated to other areas. Military academies hold 18 doctoral programmes (including 12 in technical sciences) and nine assistant professor fellowships (seven in technical sciences). Military higher education institutions offer 29 courses of study: 17 technical and 12 in the arts and social sciences. In 2016, military schools provided teaching to 20.000 students, 2200 of whom were soldiers. There are over 850 doctoral students and six to seven thousands people complete postgraduate studies and other courses annually, including approximately 1100 soldiers finishing foreign language courses every year<sup>34</sup>.

Poland passed the *Act of 27 July 2005 – Law on Higher Education* (Journal of Laws of 2012, No. 572), a fact that remained barely noticed by the Ministry of National Defence for almost two years. Military regulations either failed to be altered in a significant manner or did not undergo any changes whatsoever. Even now some of them still do not comply with the current *Law on Higher Education*, which underwent many changes in 2011 and 2016. Although these reforms could be used to create a more coherent legal system for military education, they focused on limiting the autonomy of military higher education centres in comparison to the civilian ones (cf., for instance, approving the statute and rules of study, appointing chancellors, supervising study programs). The new bill on education, dubbed the "2.0", carries similar implications. An approach of this kind does not serve teaching quality, let alone the academic rating of military institutions; hence the need for a study on teaching quality.

The research employed a survey divided into four sets of questions. The initial tree sets consisted of closed questions. The first set referred to the form of study, the second required the student to name his or her department and the third wanted them to mark on a scale of 1 to 5 the degree to which their expectations were met in terms of studies in the institution being researched. The last set contained two open questions which the students answered in a free manner. The conclusions and recommendations also include results of research conducted with other techniques.

The sampling was purposive. The subjects were 377 full-time students of: Security Studies, Management, Electronics, Cybernetics, Mechanics, and

<sup>&</sup>lt;sup>34</sup> Cf. Information provided by the Polish Ministry of National Defence during the hearing of the Committee for National Defence in Sejm [the lower chamber of the Polish Parliament] on 8 February 2017.

other disciplines associated with their courses of study. The research was conducted in the third quarter of 2016. For details, see Table 1.

Table 1. Sample characteristics

No.	Institution	Faculty	Quantity	Percentage
1	MALF	Security Studies	82	21.75
		Management	67	17.77
2	NDU	National security	100	26.52
		Management and Command	74	19.63
3	MUT	Electronics	25	6.64
		Civil Engineering and Geodesy	18	4.77
		Mechatronics and Aviation	2	0.53
		Cybernetics	4	1.07
		Electronics	2	0.53
		Advanced Technologies and	2	0.53
		Chemistry		
		Mechanical Engineering	1	0.26
Total	Total			100.00

Data source: own study.

Research participants assessed nine areas associated with their higher education institutions. Their responses were put into categories. Table 2 offers a detailed review of the results.

Table 2. Tallied results from the surveyed students of military higher education institutions (on a scale from 1 to 5)

No.	Description of the assessed area	MALF	NDU	MUT	Mean per category
1	Effective planning and informing students in advance about the time and place of classes (receiving support at the dean's office)	2.41	3.92	3.87	3.40
2	All classes took place within the designed time frame	3.48	4.18	4.02	3.89
3	Teachers were well-prepared for classes in terms of academic content	3.57	4.20	4.20	3.99

4	The classes were presented in a	3.11	3.84	3.30	3.42
4	· •	3.11	3.04	3.30	3.42
	clear and accessible manner				
5	Teachers had a positive approach	3.48	4.09	3.83	3.80
	to students, responded to ques-				
	tions and provided additional				
	explanations				
6	Teachers set specific requirements	3.73	4.14	4.30	4.01
	for passing the course at its start				
	and were consistent in keeping				
	them				
		2.42	2.70	2.54	2.50
7	The availability of teachers during	3.42	3.79	3.54	3.58
	their duty hours or on request was				
	never a problem				
8	The student-teacher relationships	3.32	4.05	3.94	3.77
	were based on mutual respect and				
	distance required by the rules of				
	study and the matriculation oath				
	· · ·	2.42	2.01	2.00	2.71
9	The behaviour of teachers was	3.42	3.91	3.80	3.71
	indisputably ethical (in terms of				
	refraining from using their privi-				
	leged position)				
10	Mean per institution	3.33	4.01	3.87	3.73

Data source: own study.

The highest mean score was reached in the area of specific course requirements being laid out clearly and referred to at the time of grading (4.01). Students estimated the preparation of teachers for classes to an average of 3.99, and the correspondence between the number of scheduled classes and those actually taking place reached 3.89. The lowest ratings were noted for planning and informing students about the time and place of classes (3.40), as well as presenting classes in a clear and accessible manner (3.42).

It seems interesting to compare the results of the survey across the investigated higher education institutions, that is, Military Academy of Land Forces, National Defence University and Military University of Technology. The share of respondents from particular institutions is shown in percentages in Figure 1.

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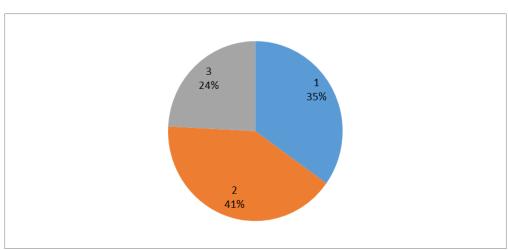


Figure 1. The percentage share of respondents from MALF (1), NDU (2) and MUT (3)

Data source: own study.

The study has shown that slightly more respondents made a positive assessment of the quality of teaching in military higher education institutions. Figure 2 provides the relevant data.

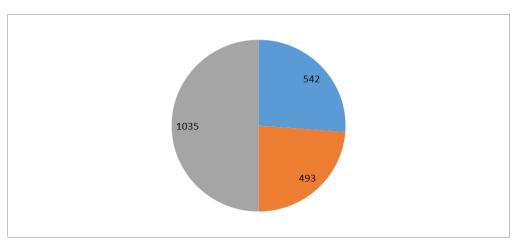


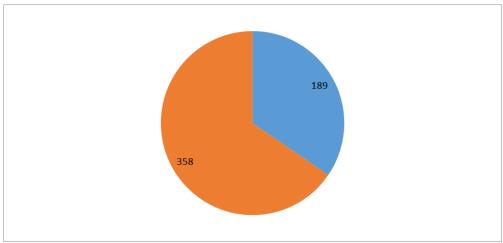
Figure 2. The ratio of positive v. negative assessment of teaching quality

Grey – total number of respondents; blue – positive assessment; orange – negative assessment.

Data source: own study.

There are differences in terms of the positive and negative quality assessment, depending on the surveyed institution. These are shown in Figures 3-6.

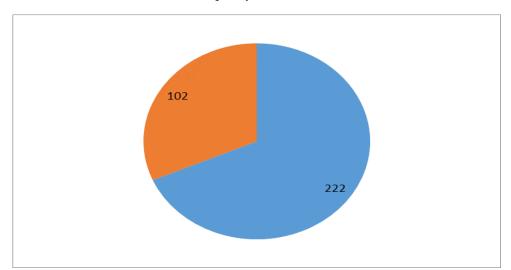
Figure 3. The ratio of positive v. negative assessment of teaching quality at MALF



Blue – positive assessment; orange – negative assessment.

Data source: own study.

Figure 4. The ratio of positive v. negative assessment of teaching quality at NDU



Blue – positive assessment; orange – negative assessment.

Data source: own study.

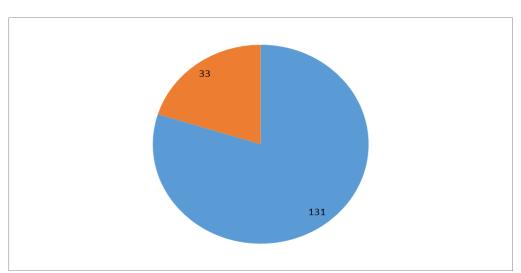


Figure 4. The ratio of positive v. negative assessment of teaching quality at MUT

Blue – positive assessment; orange – negative assessment.

Data source: own study.

An analysis of the closed and open sets of survey questions allowed to determine the strengths and weaknesses of military higher education centres. They are shown in Table 3.

# Strengths and weaknesses of MALF, NDU and MUT as perceived by the respondents of the survey

Table 3. Strengths of MALF, NDU and MUT as perceived by the respondents of the survey

Area of	MALF	NDU	MUT
focus			
Education	Teaching staff: classes with chosen teachers.	Atmosphere and prestige.	Atmosphere: friendly, encouraging atmosphere created by the institu-
	Training opportunities.	Teaching staff: lecturers well-prepared in terms of practice and experience, in	tion; a feeling of brotherhood; an interesting combination of teachers and military-civilian
	Military practice.	particular the mili-	courses.

		tary personnel; prac-	
	Pay and allowance.	tical experience sup- ported by knowledge; well-	Teaching staff: lecturers well-prepared in terms of practice and experi-
	Passes.	known lecturers from the world of politics; precision in outlining course requirements; low expectations: ease in passing ex- ams, one does not need to study hard.	ence, in particular the military personnel; practical experience supported by military knowledge; great engagement and help from "young teachers"; friendly atmosphere in class.
		and planning: interesting subjects adapted to the chosen speciality; discretionary lectures; ability to select specialities.	Class organisation and planning: polytechnic, specialist and laboratory classes; study hours; interesting subjects (e.g., tactics).
		Internships, practical classes, trainings: active methods of teaching, internships associated with the chosen speciality.	Internships, practical classes, trainings: discovering the practical side of the studied speciality; practical classes; active methods of teaching.
		Ability to participate in academic conferences held at the institution.	Student organisations: availability; the work of student self-government.  Dean's office: friendly atmosphere; ease of getting help.
Guidance	NONE.	Relationship with teaching staff: friend- liness, help, respect and availability of teachers to students.	Relationship with teaching staff: friendly approach to students, willingness to help, mutual respect.

			Discipline: rigour and
			precision.
Facilities	Sports facilities.	Classroom facilities,	Sports facilities allow-
		the appearance and	ing for a high standard
		size of the building.	of classes and participa-
			tion in activities to de-
			velop sports passions.
			Medical and social facil-
			ities.

Table 4. Weaknesses (areas in need of improvement) of MALF, NDU and MUT as perceived by the respondents of the survey

MALF	NDU	MUT
Teaching staff: PowerPoint	Teaching staff: classes based solely on	Teaching staff: self-admiration of lecturers;
"rules" not only on	•	lack of flexibility and
		time for students who
during classes –	too low; requiring	need to make up for
boring.	knowledge from	absences; too many
	beyond the syllabus.	theoretical courses; in-
Class organisation:		adequate grading; stress-
repeating the same	Internships: intern-	ing out the student (ill-
content on differ-		designed shooting class:
ent courses; cours-	_	too much theory, too
	tions.	little practice); requiring
· · · · · · · · · · · · · · · · · · ·		knowledge from beyond
· · · · · · · · · · · · · · · · · · ·		the syllabus; disregard
	•	towards women.
evening.	es.	
G 1	D 1 00' '	Class organisation: poor
		correspondence between
		lectures and classes
		(Mathematics – a sub-
institution.	down on.	ject overloaded with
Mora theoretical		content); many redun-
		dant subjects without any relation to the cho-
_		sen speciality; many
courses.		gaps in schedule due to
		the insufficient number
	Teaching staff: PowerPoint "rules" not only on lectures, but also during classes — boring.  Class organisation: repeating the same content on differ-	Teaching staff: PowerPoint "rules" not only on lectures, but also during classes – boring.  Class organisation: repeating the same content on different courses; courses just to fill gaps in the schedule; civilian courses; classes till late evening.  Compulsory participation in all events held at the institution.  Teaching staff: classes based solely on PowerPoint presentations; expectations too low; requiring knowledge from beyond the syllabus.  Internships: internships inadequate to students' expectations.  More theoretical than practical courses.  Dean's office: information flow; student being looked down on.  More theoretical than practical

			of classrooms and laboratories; classes till late evening; not enough free time for self-study; class overload (both physical and psychological); connecting work and study impossible; lectures in the auditorium not needed.  Internships: not enough internships and practical classes.  Student organisations: ill-structured.  Official off-site events during class time which need to be made up for in terms of study.
			Dean's office: getting things done or papers ready requires a waiting time that is too long.
Guidance	Obligatory physical work; "a higher education institution that's all about raking leaves and outdoor work."  No respect for students; command using students to fulfil their personal goals; students treated as cheap labour.	Condescending lecturers; teaching staff late for class; humiliating approach to undergraduates, especially by doctoral candidates.  Equal treatment for civilian and military students (discipline).	Discipline: revoking passes "for no reason."  Vice-chancellor's bad approach to students; authoritarian behaviour.  The Academy's officials lack a human approach to students.

Command give a bad example of being an officer.  Leadership from a position of strength.  Command and staff are IRRE-FORMABLE [NB: original wording much less polite].  Supervisors persistently violate rules and regulations.  Well-connected people receive special treatment.  Facilities  Unfortunate location of the institutions.		I	I	I
tion of the institu- tions.		a bad example of being an officer.  Leadership from a position of strength.  Command and staff are IRRE-FORMABLE [NB: original wording much less polite].  Supervisors persistently violate rules and regulations.  Well-connected people receive		
tion; long commuting times. Bad condition of restrooms and class-	Facilities	tion of the institu- tion; long	tions.  Bad condition of	No answer.
Library's re- rooms.		1		
sources.  Restricted access to		sources.	Restricted access to	
Bad living condi- sports facilities.		Bad living condi-		
		tions.	sports facilities.	

# The research leads to the following conclusions:

Tallied results (on a scale from 1 to 5) of the surveyed students of military higher education institutions show that the National Defence University in Warsaw received the best assessment. NDU's scores are above average in as many as eight out of nine categories. These results mainly refer to: conducting classes in the designed time frame;

the preparation of teachers in terms of academic content; presenting classes in a clear and accessible manner; the positive approach to students; setting specific requirements for passing the course and being consistent in keeping them; the availability of teachers during their duty hours; the student-teacher relationships being based on mutual respect and distance required by the rules of study and the matriculation oath; the indisputably ethical behaviour of teachers (in terms of refraining from using their privileged position).

- The Military University of Technology in Warsaw received a similar rating in the survey. Its scores were above average in seven out of the nine categories. MUT's scores below average referred only to the presentation of class content and the teachers' availability during and outside their duty hours.
- The lowest scores in the study were assigned to the Military Academy
  of Land Forces in Wrocław. MALT was assessed below average in all
  of the nine categories. The lowest ratings were given for effective
  planning and informing students in advance about the time and place
  of classes, and work of the dean's office.
- The highest positive expansiveness in terms of the qualitative assessment of the higher education institutions was reached by NDU and MUT. The students of both of these institutions expressed more positive than negative opinions. This was not the case for MALF, where there were nearly twice as many negative opinions (compared to positive ones).
- The highest negative expansiveness in terms of the qualitative assessment of the higher education institutions was reached by MUT. The negative opinions referred mainly to education (classes insufficiently prepared; extensive use of PowerPoint by both teachers and students; poor level of teaching and low expectations for students). Another low assessment was provided by the respondents in terms of guidance offered by the institution, which was dubbed "a higher education institution that's all about raking leaves and moving cabinets around." MUT's students also accused their superiors of unethical treatment and violating military regulations.
- The respondents stressed the fact that they feel better knowing that they study at a prestigious institution (NDU) and their teachers are professionals (NDU and MUT).

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# SZKOLNICTWO WOJSKOWE. ODNAJDYWANIE SIĘ W EUROPEJSKIM OBSZARZE JAKOŚCI KSZTAŁCENIA

## **STRESZCZENIE**

Artykuł przedstawia ocenę jakości kształcenia w wybranych uczelniach wojskowych w kontekście: europejskich uwarunkowań jakości kształcenia, polskiego systemu szkolnictwa wyższego oraz funkcjonowania Polskiej Komisji Akredytacyjnej. Autorzy dokonali interpretacji

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badań empirycznych przeprowadzonych w 2016 roku w trzech uczelniach wojskowych oraz przedstawili wnioski płynące z tych badań.

# Słowa kluczowe:

Wyższe szkolnictwo wojskowe, Europejski obszar kształcenia.