

SZENT ISTVÁN UNIVERSITY

DOCTORAL SCHOOL OF MANAGEMENT AND BUSINESS ADMINISTRATION

**THE POSSIBILITIES OF ENSURING THE SUPPLY OF HUNGARIAN DEFENCE FORCES  
STAFF AMONG SCHOOL EDUCATION AND HIGHER EDUCATION STUDENTS**

*THESIS OF THE DOCTORAL (PHD) DISSERTATION*

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## 1. INTRODUCTION

One of the most defining milestones of our country's past nearly three decade history filled with political, economic and social turnarounds is the radical transformation of the Hungarian Defence Forces' force organizational principle. Hungary's integration to the euro-atlantic organizations and the transformation of the requirements of the participation arising from accession and the country's security political environment have necessarily led to the thought of the establishment of a relatively small, professional force. The establishment of a force operating by the principle of volunteering has brought numerous challenges for the majority of the former NATO member countries, but the process of transition induced drastic changes in the member states of the former Warsaw Pact, also in our home country (Krizbai, 2012). A number of interdisciplinary examinations put forward in the past years underpin that the suspension of the force based on recruitment in peacetime has resulted in a good number of tasks waiting for resolution in practice and still does result nowadays as well. One of these tasks is the recruitment and preservation of the personnel possessing the right quality indices.

Although in Hungary the establishment of professional force has enjoyed significant social support (TÁRKI, 2003), even in our country we can observe the general tendency, according to which the prestige of armed organizations and professions is continuously decreasing as a result of the changes having occurred in the values of the population (Krizbai, 2014). Preventing the loss of prestige and the decrease in the moral depreciation of the defence forces, the current defence leadership puts forward the strengthening and maintenance of the citizens' trust as a continuous objective in their strategic documents. In the communication of the department addressing the young generation always had a pronounced role besides increasing the general social support (Jobbágy-Stummer, 2016). Striving for this did not start with the establishment of the voluntary force, but its intensity and penetration have significantly strengthened by the abolishment of the military service.

In the past few years in order to replace the personnel of the Hungarian Defence Forces (HDF), to mitigate the large lack of staff the above efforts have become more marked. In communication the patriotic and defence education has gained an increasingly emphasized role and in connection with this the organizational structure and task system of the department have been modified and expanded by new elements in the past period on more occasions. The educational concept of soldier colleges and high schools abolished around the millennium has been revived: with the maintaining supervision and financing of the Ministry of Defence a public educational institution has been operating again since 2013, furthermore – also from defence budget – soldier cadet sectoral training was launched in September 2017 in the country's two high schools, in the 2018/2019 school year in further three secondary educational institutions, based on British examples (honvedelem.hu, 2018).

However the Hungarian Defence Forces do not only count on high school students, but also on the students of higher education institutions, especially in filling the officer rankings requiring civil qualification and the staff of the voluntary spatial protectional reserve system being reorganized as part of the Zrínyi 2026 National Defence and Armed Forces Development Program. The department strives to remunerate the willingness of young people before graduation towards taking on military service primarily with additional credits (Baka-Lambert, 2017) and scholarship system (kormany.hu, 2017).

One strategic pillar of the forces' human capital is the officer, senior officer staff operating the organization's leadership-governance system. From 2012 the National University of Public Service's Faculty of Military Science and Officer Training (NUPS FMSOT) has become the basis of education. Simultaneously with the officer candidates' entry into military higher education they

do not only choose educational institution, but also a specific workplace, since after successfully finishing their studies they become members of the Hungarian Defence Forces' professional officer staff. In the lives of the Faculty's students the bound forms of behaviour not relevant for other higher educational institutions, military regulation and discipline, mandatory college accomodation, continuous physical training are predominant. Despite all these features the – although decreasing – number of young people applying for military vocational education still reflects a market characterized by some oversupply.

In my thesis I focused on the examination of the characteristics of the young generation providing a potential human resources input of the Hungarian Defence Forces, the age group between 14-25 years. In my thesis among others I examined the young people's commitment towards defence, the motivations beyond choosing the above mentioned subjects and military service commitment through the perspective of three segments – high school students studying *Military Knowledge*, students choosing *National Defence Knowledge* and the officer candidates studying in military higher education. In connection with my research topic I studied the factors determining the forces' macroenvironment, the labour market supply and the organization's labour demand, moreover the product and service portfolio of the Hungarian Defence Forces targeting the youth, the connecting marketing tools and their practical application.

## 2. RESEARCH OBJECTIVES

In connection with processing the relevant literature and my empirical examinations I have defined the following objectives.

a) Regarding the bibliographical review:

- O1:** In connection with my research topic the mapping of the Hungarian Defence Forces' macroenvironment, with special attention to the political, economic, social and legal aspects relevant for the forces.
- O2:** The exploration of the – mostly by statistical data seizable – general features of the young generation providing the potential human resources input of the Hungarian Defence Forces.
- O3:** Presentation of the target groups of military recruitment, furthermore the organization of the product and service portfolio applied in the recruitment practice of the defence branch – especially among high school and higher education students and the corresponding marketing tools.

b) Regarding the empirical research:

- O4:** The *Military Knowledge* subject:
  - a:** studying the questions related to the reasons for introducing the subject among the educational institutions, the conditions for education, the asesment of the teaching material;
  - b:** getting familiar with the involved high school students' subject choice decisions, exploration of their knowledge related to national defence, information obtaining habits, furthermore the mapping of their willingness for fulfilling military service.
- O5:** The exploration of the motivations beyond the subject choice decisions of the students choosing the *National Defence Knowledge* subject, additionally getting to know their willingness for military service.

- O6:** The identification of the emotional and rational factors defining the vocational choice of the officer candidates studying in military higher education and the attitudes towards military profession.

### 3. HYPOTHESES

In connection with my defined objectives during my investigation I focused on the examination of the following hypotheses.

a) Secondary education

In case of secondary educational institutions I assumed that in the background of the subject introduction we can primarily find the support of the students' vocational choice aspirations. **(H1a)**

Considering the fact that *Military knowledge* requires special knowledge from the teacher of the subject, additionally the provision of efficient learning environment, I assume that the education of the subject – because of the in numerous cases lacking personal, material and infrastructural conditions – causes difficulties for the institutions. **(H1b)**

Although students can choose the *Military knowledge* subject voluntarily, the statistical data of the past years have unequivocally proved that the studies do not automatically finish with final examination. Based on this I assume that studying the subject does not significantly promote the continuing education of high school students and neither their willingness for military service. **(H1c)**

I also assumed that the students could be well categorized based on their subject choice decisions, so among them we could find homogeneous segments, the members of which were primarily motivated by military service and did not reject the Hungarian Defence Forces. **(H1d)**

b) Civil higher education

I assumed that picking up the *National Defence Knowledge* subject could be mostly contributed to the practical aspects connected to the teaching material (e.g. there is no regular contact lesson, e-learning method, gaining credit within short time etc.), gaining information related to national defence was only secondary. **(H2a)**

I also assumed furthermore that studying the *National Defence Knowledge* subject did not significantly increase the willingness of higher education students for military service. **(H2b)**

According to my hypothesis based on the subject choice motivations we can identify a relatively homogeneous, well interpretable circle of students, the members of which are motivated by gaining information related to national defence and do not reject various forms of military service, either. **(H2c)**

c) Military higher education

I assumed that the career motives of the officer candidates were primarily characterized by rationality, emotional factors were more and more pushed to the background. The differences of motivation between genders and classes were statistically significant. **(H3a)**

Based on statistical data young people apply for the military basic education mostly after their high school studies, however the education of *Military knowledge* happens typically in vocational

high schools – previously in secondary schools – so I assumed that the officer candidates studied the subject and graduated from it only in negligible numbers. **(H3b)**

Based on former researches (Kanyóné, 2002; Szelei 2002), that students taking part in the military higher education are disappointed by their career choice and the disappointment manifests mainly among III. and IV. grade students. According to my hypothesis in our days the officer candidates are disappointed in their vocational choice too, and partially this attributable to the incomplete preliminary information related to the officer training. **(H3c)**

I also assumed furthermore that based on the career motivations we can identify a segment characterized by commitment. When youngsters choosing their career their interest towards military topics, development of physical endurance, the possibility of taking part in military missions is over sample average, but also the role of emotional factors is outstanding and the HDF can built upon their military service for years. **(H3d)**

#### 4. SOURCES AND RESEARCH METHODOLOGY

In my examination I applied the following research methods and data collection tools.

##### a) Secondary information

In my thesis I worked with a significant amount of statistical data, I was striving to use the latest information. While analyzing the macroenvironment I used the protocols of parliamentary committee meetings and information from former governmental programmes on numerous occasions. The thesis contains a significant amount of law. The main sources of the data published in the thesis are statistics of the Hungarian Central Statistical Office, furthermore its booklets published annually, describing the social-economic situation of the country. In the assessment the Social Report volume of TARKI published in the end of 2018 was of further help to me. Beyond the above, in the chapter introducing the young generation I largely built on the four-yearly domestic large sample data collections examining the 15-29 age group and the conclusions of the handbooks building upon them.

I presented the Hungarian Defence Forces' product portfolio targeting youth among others through the information found on the related websites and social network sites and the screenshots taken there. The statistics of high school and higher education rely on the database of the Educational Agency, the Faculty of Military Science and Officer Training of NUPS. In my thesis beyond these I reworked the major international and domestic scientific publications related to the topic.

##### b) Questionnaire survey

The target group of my primary research is made up of the high schools teaching the subject *Military Knowledge*, the students studying the subject, the students choosing the subject *National Defence Knowledge* and the officer candidates taking part in the basic military higher education.

My thesis contains the processed data of altogether 1007 questionnaires (see Table 1). 152 students of 10 high schools, 629 higher education students and 216 officer candidates took part in the examinations.

Table 1: Number of respondents

Academic year and semester	High schools teaching <i>Military Knowledge</i>	Students studying <i>Military Knowledge</i>	Students studying <i>National Defence Knowledge</i>	Officer candidates taking part in the military higher education
2014/15 I.	-	-	172	-
2014/15 II.	-	-	66	-
2015/16 I.	10	152	32	216
2015/16 II.			169	
2016/17 I.	-	-	73	-
2016/17 II.	-	-	117	-
<b>Together</b>	<b>10</b>	<b>152</b>	<b>629</b>	<b>216</b>
<b>Altogether</b>	<b>1.007</b>			

Source: Author's own editing

### c) Applied methods

#### *Univariate analyses*

I applied it for the primary analysis of the gained data structure, according to the given measurement level. The sum of percentage figures published in the thesis can occasionally differ from 100 because of the rounding.

#### *Factor analysis*

Multi-variant method used for data compression, the exploration of the data structure. The procedure decreases the number of initial variables and shows the latent system of connections among the original variables (Sajtos-Mitev, 2007; Szelényi, 2009). I used the methodology for exploring the correlations between the subject and career choice motivations.

#### *Cluster analysis*

The analysis organizes the observational units into relatively homogeneous groups based on the variables involved. After the procedure the elements showing a huge degree of similarity settle into a common set, at the same time they have characteristics different from the units in other groups. This is often applied during market segmentation, market structure analysis, choosing test markets (Babbie, 2003; Sajtos-Mitev, 2007). I used the method for the examination of the characteristics of high school and higher education students. When forming the clusters I applied the hierarchical procedure, to determine the cluster distances I worked with Ward's procedure.

#### *Variance analysis*

With this method I examined the impact of independent variables to dependent variables. I considered the results significant in case of  $p < 0.05$ .

#### *Word association*

Free association is a research method often applied in case of brand researches, during which the researcher asks only one question from the people interviewed (Kovács, 2011). In my examination I applied the methodology to get to know the young people's attitude towards the Hungarian Defence Forces.

## 5. MAJOR FINDINGS OF THE RESEARCH

In my thesis among others I examined the young people's commitment towards defence, the motivations beyond choosing the *Military Knowledge* and *National Defence Knowledge* subjects and military service commitment through the perspective of three segments: high school students studying *Military Knowledge*, students choosing *National Defence Knowledge* and the officer candidates studying in military higher education.

Below I only focus on the main results of the primary research.

### 5.1. Students of secondary educational institutions

After the data analysis on the high school pattern, based on the subject choice motivations three homogeneous student groups could be separated. The ones studying the subject *Military Knowledge* can be well characterized based on the factor averages of motivations (see Figure 1). The data series of the negative range are not typical for the given cluster, contrarily to the ones with positive direction. The degree of impacts is proportional to the size of the data series.

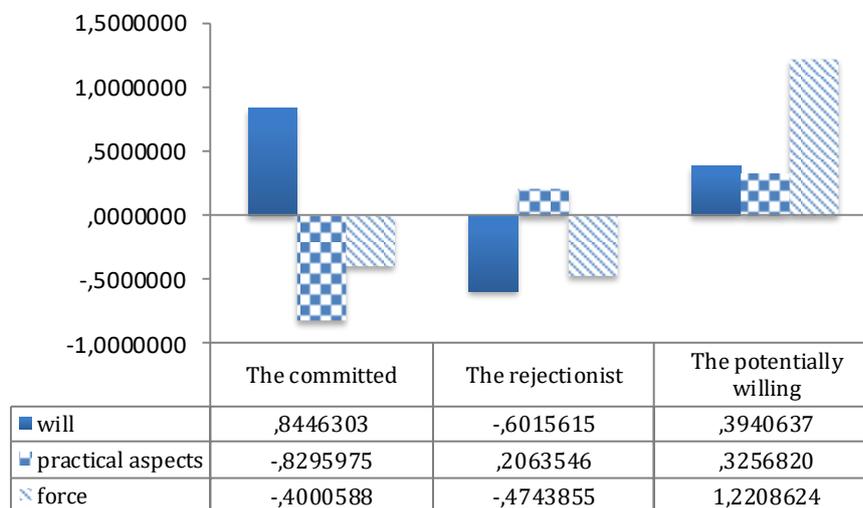


Figure 1: **Interpretation of the characteristics of the clusters depending the average values of factor coordinates**

Source: Author's own editing

#### 1. *The committed* (35 respondents; 88.6% male, 11.4% female)

They chose the subject primarily due to their interest in military topics, their future plans, looking for challenges, the impact of family traditions was marginal. Before studying the subject they had already had some knowledge about national defence, primarily originating from the circle of family/friends or gained during camping. Among the examined websites they mostly visit the news portal and Facebook page of the Hungarian Defence Forces, the websites of military forces, although the frequency and utility is not significant. The cluster members mostly (88.6%) plan graduating from *Military Knowledge*. Among the students there is a solid military career choice, they are mostly interested in military vocational training and higher education, but the contractual crew service directly following graduation can also be taken into consideration. One third of the group plans reserve service, one third of them categorically rejects it. Among the cluster members there were 3 voluntary reserve soldiers during the data collection.

2. *The rejectionist* (76 respondents; 69.7% male, 30.3% female)

They chose the subject primarily because they thought passing the graduation exam can be easier, they evaluated all other factors below the sample average. Before studying the subject they had no information about national defence, the Hungarian Defence Forces at all. Most cluster members gained information from the traditional media and relied on their primary school studies. They valued the examined websites' visibility and utility beyond the sample average in all cases, the cluster members are seemingly not interested in gaining information. One third of the students plan to graduate from *Military Knowledge*, at the same time nearly half of them (46.1%) do not intend to take the examination. They categorically reject choosing a military career, some of them are interested in other courses of the NUPS. Nearly two third of them reject reserve service, a further nearly one third has not even thought about the question. Among them there was no one fulfilling reserve service.

3. *The potentially willing* (41 respondents; 82.9% male, 17.1% female)

In their subject choice you can observe their interest in military topics, searching for challenges, development of physical endurance and the definite future military career, however the role of family traditions in this cluster is outstanding. Before studying the subject they had rather minimum knowledge on the Hungarian Defence Forces, however they valued the role of all media specified in the questionnaire above the sample average. The visibility of various websites among them is above sample average in all cases – although even the best scale value is only around three. 80.5% of students belonging to the cluster plan to graduate from *Military Knowledge*. They are overwhelmingly interested in the junior officer career (34.1%), the ratio of the ones planning military higher education is minimal (9.8%), one third of them was uncertain about the question at the time of interviewing. They would take on reserve service, but the ratio of resistant ones is higher among them. Among the cluster members there was 1 reserve soldier at the time of interviewing.

## 5.2. Students in higher education

Based on the subject choice motivations of the *National Defence Knowledge* subject the characters of the individual sets are sketched unambiguously, the young people can be well characterized (see Figure 2).

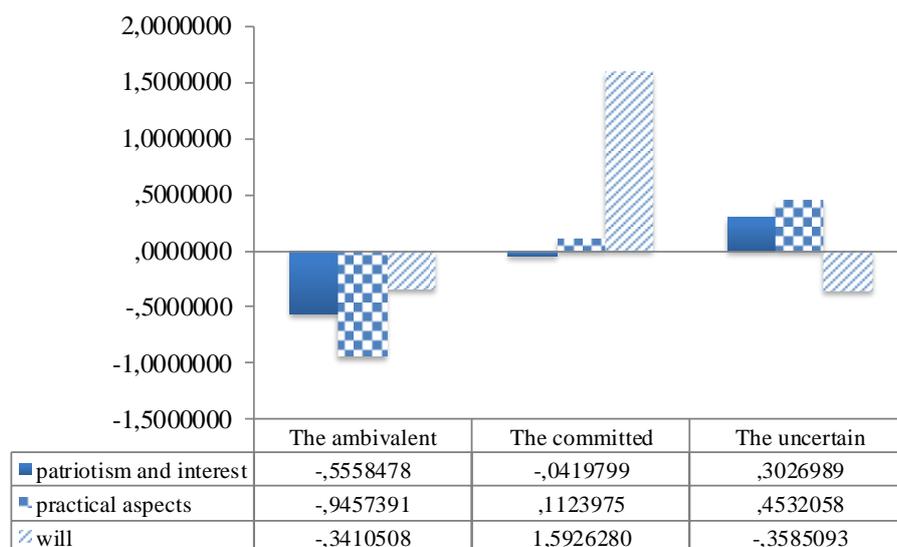


Figure 2: **Interpretation of the characteristics of the clusters depending the average values of factor coordinates**

Source: Author's own editing

1. *The ambivalent* (176 respondents; 54.5% male, 45.5% female)

Before choosing the subject they had almost no knowledge about the defence forces, national defence, but they were not even interested in these, in the media they did not even search for the related news. Choosing the subject was only influenced by the credits to gain, but they are keen on visiting for example a military force or listen to a soldier with missionary experiences. Their picture of the Hungarian Defence Forces has not changed while studying the subject at all. They reject all forms of military service, they are not even willing to take this on for additional credits. There is no student in reserve status among them.

2. *The committed* (114 respondents; 53.5% male, 46.5% female)

They primarily chose the subject because they were categorically interested in the topic, moreover the impact of family traditions and the role of the knowledge gained in high school – *Military Knowledge* – could be felt as well. Before choosing the subject they had mostly a wide range of or at least minimal knowledge about national defence, but this typically did not come from the internet. Due to the teaching material their knowledge about security policy and national defence were expanded. They would also like to have practical elements incorporated during the semester as well. Their assessment of the Hungarian Defence Forces is typically of positive direction. They do not reject military service, they would unambiguously join the national defence crew. There is also reserve soldier among them.

3. *The uncertain* (339 respondents; 51,9% male, 48.1% female)

They chose *National Defence Knowledge* primarily because of the credits to gain and the advantages of the subject (e.g. electronic teaching material, no obligatory class attendance). Previously they had little knowledge about national defence, and that was originated overwhelmingly from the internet and traditional electronic and printed media. After having acquired the teaching material their knowledge increased and gaining credit was not even that important to them. During the subject development they did not propose practical elements, rather the creation of a connected website. During the semester their attitude towards the defence forces did not fundamentally change. They would probably take on reserve service, but additional credits do not motivate them. There is reserve soldier among them.

### 5.3. Military higher education

Based on the factor averages of the responses to career motivation the officer candidates formed three, relatively homogeneous clusters (see Figure 3).

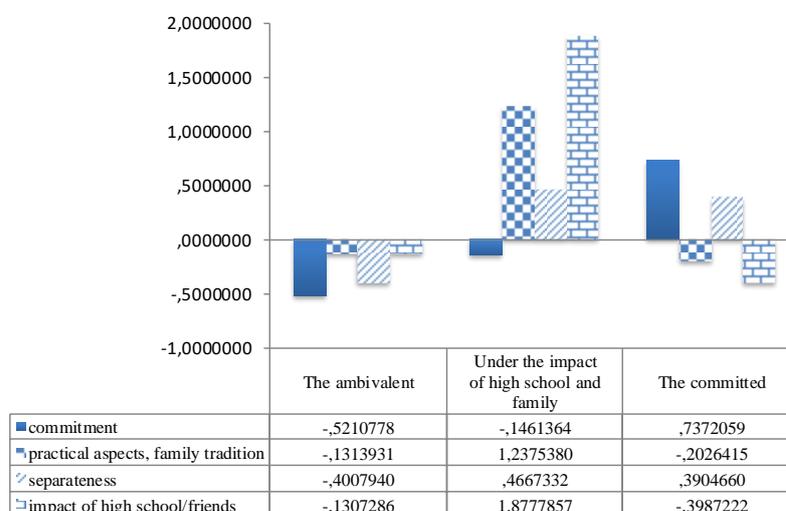


Figure 3: **Interpretation of the characteristics of the clusters depending the average values of factor coordinates**

Source: Author's own editing

1. *The ambivalent* (109 respondents; 81.7% male, 18.3% female)

The biggest ratio of III. and IV. grade students can be found in the most populous group. They valued the examined motivational factors below sample average, only family tradition had somewhat higher significance. Most of them applied for military higher education not being experienced in national defence related topics at all, although part of them already considered themselves informed enough. The cluster members gained the related news mostly from family members and friends. In getting informed about military higher education also the ones living in their surrounding environment had a significant role, also the role of gaining experience in FMSOT's open day event was important. Among the other programmes supporting career orientation they previously mostly visited military heritage sites and took part in the presentation of recruiters. Only three people studied the *Military Knowledge* subject, on intermediate level one person, on advanced level two of them took the examination. Most people considered military career choice as a failure in this cluster.

2. *Under the impact of high school and family* (25 respondents; 100.0% male, 0.0% female)

A group made up of only men, the impacts of studying *Military Knowledge* can be felt mostly among them. When choosing their career they attributed a significance higher than average among others to serving their country, wearing uniform, developing their physical endurance, sports opportunities, the secure scholarship, family traditions, studying *Military Knowledge*. They gained their knowledge about national defence during the secondary school years primarily from the internet, in military events, during camping, via studying the subject *Military Knowledge*. They gained information related to officer training also mostly from the connected websites, they valued the open day of FMSOT less. Among career orientational events they mostly participated in the presentations of recruiters, military events, visited military heritage sites. Overallly most members (14 respondents) of this cluster studied the *Military Knowledge* subject and two of them did not graduate from it. Only one third of the cluster members would like to finish their studies in the chosen military faculty, the others were disappointed during the training.

3. *The committed* (82 respondents; 93.9% male, 6.1% female)

When choosing their career their interest towards military topics, development of physical endurance, the possibility of taking part in military missions is over sample average, but also the role of emotional factors (challenge, serving their country, menly profession) is outstanding and secure scholarship is not negligible for them, either. Their pre-entrance exam knowledge related to national defence was primarily originated from the internet, they got informed from military higher education also primarily from here and the ones living in their immediate environment. 28% of them did not take part in the open day of FMSOT at all. During their secondary school years they mostly attended military heritage sites, presentations of recruiters. Only two of them studied *Military Knowledge* and they graduated on advanced level. Considering their ratio, the number of ones disappointed by their career choice is the smallest among them.

## 6. NEW AND NOVEL SCIENTIFIC RESULTS

Based on the bibliographical overview and my empirical results I summarize the new and novel scientific results of my PhD as follows.

1. In connection with my research topic I analyzed the factors influencing the operation of Hungarian Defence Forces with a complex approach, with the help of the PESTEL method. When reviewing the macroenvironment I examined the factors relevant for military forces in political, economic, social and legal dimensions.
2. In my thesis I presented a comprehensible analysis of the general characteristics of the young generation in a novel way, by reviewing the relevant literature. In addition to precisely defining the examined age group I carried out the analysis of the social group's demographical structure, education, career choice aspirations, labour market behaviour, information gaining habits and studied the young people's perception of the Hungarian Defence Forces, the prestige of military career.
3. In connection with the Hungarian Defence Forces' labour demand I was the first one who organized the products and services applied among high school and higher educational students in the past years and the connected marketing tools and their practical application.
4. I was also the first one who in the civil school and higher education carried out a gap filler research with systematic questionnaire data collection regarding the subjects *Military Knowledge* and *National Defence Knowledge* and in connection with this I examined the young people's commitment towards national defence, their willingness for military service with mathematical-statistical methods.
5. I enriched the researches carried out among military higher education students with further results. Based on the information gained via questionnaire data collection I proved that the disappointment experienced during the officer vocational education and the incomplete preliminary information related to the training show a statistical correlation. One of the main segment creating factors on the sample examined is military commitment, but following the statistical procedures a cluster made up of mainly third and fourth grade students was also formed, where most members considered their career choice a failure.

In the table below (see Table 2) I summarize connections of objectives, used data sources, methods and major findings of the research.

**Table 2: Objectives, sources, methods and scientific results of the thesis**

<b>Objectives</b>	<b>Sources</b>	<b>Methods</b>	<b>Results</b>
Mapping of the Hungarian Defence Forces' macroenvironment.	<ul style="list-style-type: none"> <li>· literature sources</li> <li>· former governmental programmes</li> <li>· protocols of parliamentary committee meetings</li> <li>· laws</li> <li>· HCSO databases</li> <li>· Social Report volumes</li> <li>· Good State and Governance Reports</li> </ul>	<ul style="list-style-type: none"> <li>· PESTEL-analysis</li> <li>· analysis of literature sources</li> <li>· descriptive statistical methods</li> </ul>	Mapping and interpretation of macroenvironment.
Exploration of the general features of the young generation.	<ul style="list-style-type: none"> <li>· HCSO databases</li> <li>· Good State and Governance Reports</li> <li>· Social Report volumes</li> <li>· Educational Agency databases</li> <li>· large sample data collections examining the 15-29 age group</li> </ul>	<ul style="list-style-type: none"> <li>· analysis of literature sources</li> <li>· descriptive statistical methods</li> </ul>	Analysis of the features of the young generation.
Presentation of the target groups of military recruitment, furthermore organization of the product and service portfolio applied in the recruitment practice.	<ul style="list-style-type: none"> <li>· laws</li> <li>· websites</li> </ul>	<ul style="list-style-type: none"> <li>· analysis of literature sources</li> <li>· analysis of websites</li> </ul>	Systematization of the tools applied in the recruitment practice.
Analysis of high schools teaching Military Knowledge.	<ul style="list-style-type: none"> <li>· former researches</li> <li>· questionnaire survey</li> </ul>	<ul style="list-style-type: none"> <li>· descriptive statistical methods</li> </ul>	Mapping of students studying Military Knowledge willingness for military service.
Analysis of students studying Military Knowledge.	<ul style="list-style-type: none"> <li>· Educational Agency databases</li> <li>· former researches</li> <li>· questionnaire survey</li> </ul>	<ul style="list-style-type: none"> <li>· descriptive statistical methods</li> <li>· variance analysis</li> <li>· factor analysis</li> <li>· cluster analysis</li> <li>· word association</li> </ul>	
Analysis of students studying National Defence Knowledge.	<ul style="list-style-type: none"> <li>· FMSOT databases</li> <li>· former reseraches</li> <li>· questionnaire survey</li> </ul>	<ul style="list-style-type: none"> <li>· descriptive statistical methods</li> <li>· variance analysis</li> <li>· factor analysis</li> <li>· cluster analysis</li> <li>· word association</li> </ul>	Mapping of students studying National Defence Knowledge willingness for military service.
Analysis of officer candidates taking part in the military higher education.	<ul style="list-style-type: none"> <li>· former researches</li> <li>· questionnaire survey</li> </ul>	<ul style="list-style-type: none"> <li>· descriptive statistical methods</li> <li>· variance analysis</li> <li>· factor analysis</li> <li>· cluster analysis</li> <li>· word association</li> </ul>	Analysis motivating factors defining the vocational choice of the officer candidates.

Remarks: HCSO (Hungarian Central Statistical Office),  
 FMSOT (Faculty of Military Science and Officer Training)  
 Source: Author's own editing

## 7. CONCLUSIONS AND PROPOSALS

Among the high schools and their students constituting one of the flagship target groups of military recruitment and on the sample of higher education students I carried out a primary research, my preliminary assumptions can be summarized based on the gained results as follows.

- High schools decided on the introduction of the *Military Knowledge* subject primarily in order to educate their students on discipline/brotherhood. Supporting the students' career choice was however also an important aspect, with this statement the institutions could also identify themselves to a significant extent, so my **hypothesis H1a was proven**. I also partly consider my **H1b assumption accepted**, since the majority of the interviewed institutions have no issues with teaching the subject, but there were also schools, which – especially in the practical education – struggle with difficulties.

It became obvious that studying the subject does not reasonably increase the high school students' willingness for military service. On the whole sample reserve service was rejected by half of the young people, only one-fourth of them was planning a military career. My **H1c hypothesis** can be **verified** both based on the statistical data provided by the schools and the answers of the students asked. I also consider my **H1d hypothesis as accepted**, since on the sample of students a homogeneous group was formed (23.0%), the members of which were motivated by military career choice, they were mostly interested in higher education and vocational training. At the same time another cluster was also formed (27.0%), the members of which did not reject the Hungarian Defence Forces, but in their responses also forcing impacts (e.g. family, school) were reflected.

- All the assumptions of the examination in civil higher education (**H2a, H2b, H2c**) were **proven**, since taking on the *National Defence Knowledge* subject is primarily motivated by credit gaining opportunity (4.31), the referral of group members (3.76) and the e-learning teaching material (3.60), as the students mostly identified themselves with these statements. Examining the complete sample, the rejection of military service forms (contractual, reserve) is significant. Parallely with this a segment was formed (18.0%), the members of which decided to study the subject due to strong interest, among them the impact of family traditions could be felt, their perception of the Hungarian Defence Forces was typically of positive direction, they were willing to take on military service and although in negligible numbers, but there was also voluntary reserve soldier among them.
- **My H3a assumption was partially proven**, since – on the whole sample –, among the major career motives of officer candidates conscious and emotional factors could be found to an equal extent, however based on the responses to the open question examining the attraction to military profession, the young people primarily listed rational reasons. After the comprehension the concepts linked to the 'secure' attribute (e.g. vision, living, workplace, job), competitive salary, career building were mentioned on the most occasions. Referring to emotional factors – e.g. patriotism, profession, serving your country – was somewhat, but not significantly less frequent among the respondents. Regarding the motivations of the participants of the officer vocational training statistically verifiable differences can be identified between men and women and also between students of different grades.

Only 13.9% of the surveyed people studied the *Military Knowledge* subject in high school, so **I consider my H3b hypotheses accepted**. My **H3c hypothesis** has also been verified, since the disappointment experienced during the officer training and the incomplete preliminary information related to the training showed statistical connection. Similarly **H3d assumption** was also verified, since based on the career motivations a cluster characterized by commitment above sample average was formed among officer candidates.

Considering the ratios, the feeling of career choice insecurity, disappointment is the least often experienced among them.

Further conclusions and suggestions related to my research:

It is essential to clarify how the profession considers the subjects *Military Knowledge* and *National Defence Knowledge*. I do share Varga's opinion (2012) as per which we need to make it obvious whether the goal is to ambition future military service or disseminating information. Sharp contours certainly cannot be drawn. The past more than ten years have unambiguously proved that the role of subjects in gaining knowledge cannot be questioned, in the meantime studying subjects can also possibly turn some young people towards military service, I underpinned it empirically as well. At the same time it is also obvious that the national defence type of subjects newly occurring in higher education – through which the Hungarian Defence Forces indeed step up as their own competitors – massively point towards military recruitment. The same can be said about the subject taught in high school as well, since the new naming does not only cover much more practical elements, but – mostly in the sectoral vocational training – declaredly serves recruitment purposes. I also agree with the view of Madarász (2018), as per which the duality of national defence education and military vocational training can lead to career visualization uncertainty, disappointment, dropout among students. Researches prove (Liskó, 1998; Lannert 2004; Lukács 2013) that the majority of the young people forced to decide early do not have a sound visualization about their future yet. In the current procedures the role of pedagogues has not been clarified either, since different and different behaviours are desired in both disseminating information and preparing the students for continuing their studies for a military career.

During a previous research work of mine (2011) I highlighted that the long term planning of processes aiming at the national defence education of the youth, furthermore the transparency of connected tasks were then not ensured, so it was necessary to create the youth strategy of the branch as early as possible, which cannot exclusively be part of either the human or the recruitment strategy, it can only form an intersection with them. Furthermore I reached the conclusion that the lack of strategical planning characterizing the specialty of national defence education, the insufficient resource allocation constitute risk considering this task of the department. This is why it is indispensable to create and maintain a project portfolio enabling the harmony of tasks being logically connected, but existing mainly separately, resulting in the more efficient utilization of resources, eliminating the risks in ad-hoc decisions and a connected system (project organization) supported by consequent marketing and PR activity. Although the harmonization of national defence educational system elements was launched by the department in the summer of 2017 (Kun Szabó, 2018), my current researches underpin my findings from eight years ago, so I further support them.

My personal view is that the overview of the current market analysis methods and target group creation principles cannot be passed by either. Although there are features characterizing the whole young generation, numerous researches prove the heterogeneity of the age group, so the target group cannot be described by simply for example demographic characteristics. The market failures of business sphere are in most cases rooted in the fact that the management divide the heterogeneous market based on their own visions, without the knowledge of detailed data. The a priori segmentation does not carry any further additional information, this is why certain literature (Wind, 1978; Fuller et al, 2005; Simon, 2006; Sajtos-Mitev, 2007) prefers the post-hoc procedure, through the application of which the heterogeneity between groups and the homogeneity among segments can be created. Boudreau (2010) especially draws the attention of HR experts to the fact that due to the market segmentation proven in the economic sphere labour management can be reloaded and optimized and the early return on expenditure can also be expected.

In my opinion the above can be construed both in the (labour) market of public service and furthermore in the internal market of the given organization (e.g. in creating the employee profiles), this also provided the fundamental thought of my primary analysis presented in my thesis. I examined the successes and failures of the Hungarian Defence Forces' supply recruitment in three segments. I empirically underpinned that there were groups among the students of both high school and higher education, the members of which positively turned towards the different forms of the organization and military service, but the majority of the youth were not characterized by this: the expectations of students towards subjects and the requirements of the department did not point to the same direction.

I also pointed out among others that young people arrived to the officer vocational training mostly from high schools, i.e. from institutions where national defence knowledge were not taught. For me this again draws attention to the deficiencies of target group forming principles. In case the entrant still studied the *Military Knowledge* subject and also graduated from it, for him – additionally to the extra points, which can also otherwise be granted for the advanced level examination – it does not provide any additional advantage in military higher education, this is why the earliest possible revision of the current practice is advisable. In favour of the extra points which can be gained in the selection procedures, it is also worth considering connecting the subject to the system of National Secondary School Academic Competition. In my research the disappointment experienced during the officer training and the career choice uncertainty showed a statistical connection with the deficiencies of the preliminary information of higher education applicants. To eliminate this and prevent the further decrease in supply, it is of key importance to review the elements of the current communication process, the marketing mix and to create harmony not only in the National University of Public Service, but also within the organization of the Defence Forces.

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## Abstract

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