University of Public Service Faculty of Military Sciences and Officer Training Doctoral School of Military Sciences

PhD dissertation

Author's Summary (Thesis)

Tibor Sándor Szabó ret. police lieutenant-colonel:

The complex preparation of the staff of public service organizations for the safe transportation

Consultant: Prof. Dr. Vilmos Sándor PhD, ret. border-warden brigadier

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CONCEPTUALIZATION OF THE SCIENTIFIC PROBLEM

Moving from the Hungarian Military Forces to a new position at the Training Subdivision of the Dignitary Protection Service (Republic Guard Regiment), as an executor and a future instructor I deliberately analyzed the specialties and requirements of the whole new task system.

I recognized that driving tasks connected to the special scope of activities – including the most endangered type of driving with the usage of distinctive signals – need such basic theoretical and practical driving technical knowledge, which can only be completely obtained by regular training and with the help of practical routine.

In my experience, within a short time the drivers on their own are not able to achieve appropriate theoretical and practical knowledge necessary to the secure transportation.

During the years of learning the drivers mean a potential source of danger to their environment and to themselves.

During my scientific research it became quite clear that in Hungary there isn't any codificated, complex, coherent and regularly organized training system existing for the professional drivers of public service organizations.

This recognition inspired the choice of my thesis' topic, in which I aimed at developing the theoretical basis of a selection-, training- and further training system, which would fill the gap in the actual driving preparation system.

HYPOTHESES

- 1. On the basis of my actual knowledge I assumed that the hungarian driving training structure lacks a unified and integrated selection-, training- and retraining system, which would be more efficiently able to ensure the professional preparation of the drivers of public service organizations.
- 2. On my several years of teaching experience in military and driving training I assumed that the professional preparation of the drivers of public service organizations is not possible without having a complex, coherent and regularly organized training system.

THE AIMS OF RESEARCH

- 1. To reveal and to analyze the specialties of the human physique and psyche, the theoretical basis of the transportation system and the aspects of a uniformed evaluation-, training and retraining system of public service organizations' drivers. To prove that the safe transportation of drivers must be based on a complex and coherent selection method, and an appropriate theoretical and practical preparation and retraining system.
- 2. To point out and to prove that in developing the public service drivers' selection and professional training system, a unified approach is needed.
- 3. To certify that the number and the severeness of the eventuated accidents of the public service drivers trained in the actual system, are demonstrably lower than those who haven't been trained.
- 4. To develop a possible version of a unified theoretical and practical based selection and training system, which is appropriate to fulfill the special requirements as well.

METHODS OF RESEARCH

- To achive my searching aims I evaluated the explored issues with the application of qualitative and quantitative research strategies. Within the frameworks of these research strategies, I applied the methods of analogy, adaptation, observation, induction and deduction.
- I processed the collected data with mathematical and statistical methods, and I made comparative analyzations with the results of that.
- I studied the related acts and other legal devices of the state governance, the rules and regulations of the public service organizations regarding their execution of their tasks and their training system, and other related printed and electronical sources. I extended my searchings of materials for foreign literature as well.
- I corresponded and consultated with other researchers, experts and professionals dealing with similar topics.
- I attended many topic related national and international conferences, and I gave lectures on the field of my research and results.
- As a member of the Association of Transportation Science and the National Association of Law Enforcement Doctorandi I attended their conferences, lectures and work-shops.

BRIEF SUMMARY OF THE RESEARCH BY CHAPTERS

In the first chapter I examined the role of the driver in the transportation system. Expanding the ternary coherence system of road transportation, I approved that the most important from the three elements is the human factor. I revealed the main characteristics of transportation security and road accidents. I evaluated the possible reasons of road accidents and the role of the drivers.

In the second chapter I examined what transportation requires from drivers. I revealed the physiological and psychological principles of road transportation, and the characteristics and necessity of information processing and moving skills of drivers. I analyzed the aspects of mental requisition of driving and its possible effects on the driving procedure.

In the third chapter I reviewed the legal norms regulating the necessary qualifications and other types of requirements for professional drivers. I examined the coherence of job and vocational suitability. I revealed the similarities and differencies between suitability and

competency, and I analyzed the necessary competencies for driving. I proved that the keystone of secure transportation is prevention, and that the most important task is the determination of suitability of professional drivers. I exposed the legal, medical, psychological and professional requirements of suitability for driving.

In the fourth chapter I analyzed the hungarian and EU aims and directives for transportation security and traffic policy. I reviewed the training system for professional drivers and I introduced the actual aspects of it. I proved that basic level and regular retrainings for drivers are needed in order to improve transportation security.

In the fifth chapter taking my scientific results, conclusions and training experiences as a basis, I presented an own developed training system for drivers. I exposed the fields, aims, characteristics, structure and levels of that new complex system. I introduced the training system for drivers applied by the Republic Guard Regiment.

SUMMARIZED CONCLUSIONS

- The most important factor in the human-vehicle-environment system is human.
- Driving means a simultaneous physical and psychological demand, therefor taking part in transportation requires full attention and awareness.
- In road accidents human factor plays the most significant role, therefor the weakest link in the system of transportation is the man in traffic.
- The primary cause of the majority of road accidents is the false human behaviour. In order to ensure transportation security the most important task is to decrease the possibility of human failure. For this the possible reasons of human mistakes must be acknowledged.
- Driving is a very complex action, therefor its demands for information processing and moving skills are really high. Driving makes special suitability claims on drivers, for this reason the evaluation of suitability is very important.
- The general, specific and functional competencies necessary for driving must be determined. The necessary special and functional competencies can only be acquired by appropriate training procedure.
- The suitability requirement system for professional drivers must include the conditions of legal, medical, psychical and psychological suitability.
- The main purpose of the national and EU directives and actions is the aggravation of acquiring driving licence and the training procedure of the drivers. The continuous improvement of drivers' training system must be a priority.
- Currently only few of the professional drivers take part in professional trainings. Therefor the most efficient tool of achieving the prior tasks determined in the directives and actions would be the development of a training system with uniformed structure and common approach.
- Due to the changed assignments of the Hungarian Armed Forces, the numbers of their traffic related tasks have been increased, and the speed of their vehicles and the potential threat to them have also been risen. For this reason the safe execution of these tasks requires special driving technical and defence tactical knowledge.
- The prevention and fencing of dangerous situations can be learned. The drivers must be prepared for that with special methods and trainings.
- The new training and retraining system of the public service drivers can be qualified as a non-formal education for adults, which reflects the idea of life long learning.

- The purpose of the training and retraining system is to develop such special and functional competencies which are necessary for professional drivers and furthermore it helps to acquire high level professional knowledge and proper behaviour culture.
- For achieving the determined goals, the training system for professional drivers must be planned so that it would be appropriate from the time of admission to the end of the period of employment, including the possibility of continuous and efficient way of learning and evaluation.
- The new training system is only able to ensure the effective preparation of drivers if it is operated with determined structure, different training levels and appropriate conditions.
- With the initiation of this new training system, significant improvement in public service drivers' transportation security can be expected.
- This new training system can easily be adapted to the goals of transportation security drafted in national and EU directives and legal acts.
- For efficient and professional execution of driving technical trainings it is recommended to establish the regional Training Centres with proper conditions.
- Besides that it is suggested to establish the Central Training Base near Budapest with all the necessary conditions for special trainings.

NEW SCIENTIFIC RESULTS

- 1. I revealed and analyzed the specialties of the human physique and psyche and the theoretical basis of the transportation system and the aspects of a uniformed evaluation-, training and retraining system of public service organizations' drivers. I proved that the safe transportation of drivers must be based on a complex and coherent selection method, and an appropriate theoretical and practical preparation and retraining system.
- 2. I pointed out and proved that in developing the public service drivers' selection and professional training system, a unified approach is needed.
- 3. I certified that the number and the severeness of eventuated accidents of the public service drivers trained in the actual system, are demonstrably lower than those who haven't been trained.
- 4. I developed a possible version of a unified theoretical and practical based selection and training system, which is appropriate to fulfill the special requirements as well.

SUGGESTIONS AND RECOMMENDATIONS

- The training system is suggested to be operated upon the system of Central Training Base and regional Training Centres.
- I suggest to initiate this new training system for public service drivers progressively. Firstly the training for drivers using distinctive signals should be extended to all with similar tasks.
- Before introducing the advanced level trainings, the regional Training Centres and the Central Training Base must be established for special driving technical education. Afterwards the Central Training Base can be used by the staff of law enforcement, military and disaster management organizations for their special trainings, independently or within cooperation.
- As a long term goal I suggest to regulate that acquiring driving licence in Hungary would only be possible after a successfully accomplished basic level driving technical

training. During the period of learning the compulsary driving skill training is recommended to be executed in the regional Training Centres as well.

• I suggest to supplement the military vehicle driving training program of the Hungarian Armed Forces with the topic of applied driving technical skills in road traffic and with the topic of unique training for the staff with special assignments.

PRACTICAL USAGE OF RESEARCH RESULTS

The new training system elaborated in my thesis gives a theoretical base for the professional training of public service drivers. After compiling detailed training plans and syllabi, the introduction of the new system would contribute to the safety of transportation. With proper conditions I recommend its progressive introduction by the Ministry of National Development, Ministry of State for Infrastructure, who are in charge of elaborating legal acts concerning transportation security.

LIST OF TOPIC RELATED PUBLICATIONS OF THE PhD ASPIRANT

Kommunikáció a közúti közlekedésben, Belügyi Szemle 2005/7-8. pp. 125-132.

A megkülönböztető jelzéseket használó gépjárművezetők szakmai alkalmassági vizsgálati-, képzési- és továbbképzési rendszere, Belügyi Szemle 2008/6. pp. 95-102.

Agresszió a közutakon, Rendészeti Szemle 2009/4. pp. 120-127.

A személyvédelmi képzés, mint a felkészítés új dimenziója. Hadtudományi Szemle 2010/1. pp. 81-86.

A belügyi és igazságügyi együttműködés mérföldkövei az Európai Unióban. Szakmai Szemle 2010/2. pp. 22-35.

A közúti utazás- és szállítmánybiztosításban résztvevő gépjárművezetők felkészítési rendszere, Rendvédelmi füzetek 2010/4. pp. 151-162.

Training system for drivers present in transport and shipping-control, Tradecraft Review (Szakmai Szemle különszám) 2011/1. pp. 144-152.

Szabó S.-Ézsiás Cs.-Pomozi S.: Speciális vezetéstechnikai ismeretek, Bevezetés az antiterrorista gépjárművezetésbe (ZMNE, 2011.)

A megkülönböztető jelzéseket használó rendőrségi gépkocsivezetők pályaalkalmassági vizsgálati eredményeinek összehasonlító elemzése, Magyar Rendészet 2011/4.

Speciális gépjárművezetési ismeretek. Társadalom és Honvédelem 2012/1-2. pp. 610-616.

PROFESSIONAL AND ACADEMIC RESUME

Personal data:

Name and rank: Szabó Sándor Tibor ret. Police lietunant-colonel, police counsellor

Place of birth: Debrecen
Date of birth: 1964.12.23.

Address: 2000 Szentendre, Attila u. 3.

E-mail: szabosa@freestart.hu Marital status: married, two children

Studies and qualifications

2008. National University of Public Service, Faculty of Military Sciences and

Officer Training, Doctoral School of Military Sciences, PhD aspirant

2004. Budapest University of Technology and Economics, Faculty of Economic

and Social Sciences, teacher of engineering

1998. ORFK Law Enforcement Organizations Training Centre, Faculty of

Advanced Police Science

1994. University of Agriculture Science Gödöllő, Faculty of Agricultural

Mechanical Engineering, mechanical engineer

1994. Zrínyi Miklós National Defence University Faculty of Military Sciences,

military engineer officer

1987. Zalka Máté Military Engineer College, Faculty of Military Vehicle

Maintenance, transportaion engineer

1983. Landler Jenő Technical Vocational School, car mechanic

Other qualifications

2003. ORFK Law Enforcement Organizations Training Centre, Course for driving

technical skills instructor

1997. Dignitary Protection Service (Republic Guard Regiment), Course for

dignitary protection

Professional experience

2011- Petzelt József Vocational and Technical School, Szentendre, teacher of

mechanics

2010- Zrínyi Miklós National Defence University, Faculty of Military Sciences,

external lecturer

2010. retirement

2008. ORFK Dignitary Protection Service, Division of Training, Head of Driving

Technical Training Subdivision

1997. ORFK Dignitary Protection Service, Subdivision of Training, *Driving*

training instructor; head of training

1987. Kossuth Lajos Military High School, Department of Armoured, lecturer;

assistant professor; adjunct

Planning, organization and execution of special professional preparations

Ministry of Defence:

- MBT-, AVF-, and vehicle driving trainings
- Special driving technical trainings
- Dignitary protection trainings

Ministry of Foreign Affairs:

Special driving technical trainings

Slovenian Government Guard:

- Special driving technical trainings
- Dignitary protection trainings

Police (Special Forces):

- Special driving technical trainings
- Dignitary protection trainings

Hungarian Customs and Finance Guard Central Patrol Service:

- Special driving technical trainings

Capital Fire Department:

Special driving technical trainings

Embassies (USA, United Kingdom, French Republic):

Special driving technical trainings

Languages:

- English: intermediate level "c"
- Russian: basic level "c"

Assosiation membership:

- Assosiation of Transportation Science *member*
- National Assosiation of Law Enforcement Doctorandi member