

Thesis of University PhD study

**THE SYSTEM OF OCCUPATIONAL HEALTH PSYCHOLOGY AND
WORKPLACE HEALTH PROMOTION
AT THE HUNGARIAN REPUBLIC'S POLICE AND
THE CHARACTERISTICS OF WORK RELATED SUBJECTIVE
STRESSLOAD – ESPECIALLY THE TIME FACTOR – AMONG
THE POLICE OFFICERS**

-Is it really hard to be a police officer?-

Szabó Erika

Consultant: Dr. Habil. Münnich Ákos



DEBRECEN INIVERSITY

Human Sciences PhD School

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1. THE AIM OF STUDY AND THE CONCEPTUALISATION OF THE TOPIC

For the leadership of the Hungarian Republic's Police from the human political aspect keeping its well-trained staff -and because of this-, the most expertise is among the most important tasks. The fluctuation in the last few years made it, if it's possible more important, because this phenomena in some cases made it impossible to fulfill even the daily routine tasks of the police station.

Considering the close relationship between work-related stress and migration from the workplace (Kahn és Byosiere, 1992; Leka et al. 2004) it makes my study especially unique, in besides showing the health psychology and health promotion system of the Hungarian Republic's Police my aim was to explore the characteristics of experienced stress-load caused by the police officer life and its relation to the years of being on duty as time factor. This second one makes it especially useful from the aspect of the psychological fitness system of the police that's prescribed the annual compulsory psychological fitness checking of the officers and its method and timing too: under 40 years in every 3 years, 41-50 years in every two years and above 51 years in every year. This system has been criticized both from the psychologists and the police officers taking part in it.

Psychology and the thought of taking care of the police officers in the Police developed parallel with the health psychology and health-promotion at the workplace as a point of view based on the conception of mental health and the so called bio-psycho-social model, that puts health and its promotion in its center of attention – that is detailed in my study. This road lead us from the classic medicine that treats only the manifest forms of illnesses, through the classic mental health that's aim is to prevent the illnesses that has psychic origin while working, through the invention of aimed psychological fitness-checking and mental health taking care centralized system and the positive mental health that emphasizes the individual's responsibility for his own health, through the prescription of trainings and psychological education for the officers, to the introduction of the “***Psychological protocol for professional psychologists at the Hungarian Police***” in 2009. This protocol talks about complex health protection and health promotion system at the Hungarian Republic's Police.

Based on Segal's (1999) complex health promotion model at the workplace – that wrote in different parts about the individual' and the organization's tasks in health promotion, besides this it emphasizes the role of direct health services (psychological and social) – we can draw the conclusion that the Hungarian Republic's Police's Human Service and its Psychological Service carries out several activities that aims and promotes the officers health (*1st table*).

1st table: Points of intervention for the health promotion at the workplace at the Hungarian Republic's Police (In the Comments part I refer to the actual state and practice)

INTERVENTIONS AT THE ORGANIZATIONAL LEVEL	INTERVENTIONS AT THE INDIVIDUAL LEVEL
I. The regular examination and follow up of the organization's health state (physical - psychical - social) <i>Comment :</i> the summarization and analysis of the data collected from the annual fitness-checking; different centralized tests	I. The complex exploration and regular follow up of the employees (physical-psychical-social) <i>Comm.: complex fitness checking before entering and annual suitability tests till being a member;</i>
II. Anti -Blocking: everything must be in easy reach for everyone, considering the needs of those ones that are with special needs physically and/or mentally caused by the workload. <i>Comm.:</i> There are only a few examples for that, only in special cases.	The exploration of the real needs of the employees highly needed for both.
III. Communication in the organization (the development of the organizational culture and the workplace's atmosphere through this) <i>Comm.:</i> Regular forums for the officers, intranet sites, information portals, inner mailing system, etc.	<i>Comm.:</i> The exploration of the real needs happens only in very rear cases, generally it wouldn't be carried out even before the serious changes in the organization.
IV. Promotion of the socialization and fitting in into the organization <i>Comm.:</i> welcome anniversary for those who entering the organization: welcome anniversary, conversation with the leader and regular fitness checking within one year.	
V. The education and the development of the organization's leaders <i>Comm.:</i> Leadership and master training for police leaders for the middle and top leaders; the other trainings would be carried out at the local levels.	II. The education of the employees and would be employees <i>Comm.:</i> The general education is provided for the officers, but trainings are rare
VI. Development of work related health services <i>Comm.:</i> general health service net at local levels, ÁEK	The exploration of the real needs of the employees and the constant being in contact with them can promote the effectiveness of both services.
VII. Providing direct services for the promotion of the physical, mental and social well-being: <i>Comm.:</i> the basic psychological and medical services at the local level, ÁEK, Human Services (social taking care)	<i>Comm.:</i> The exploration is common at the local level but usually in informal ways.

In the health promotion system of the Police the 21/2000 regulation plays an important role, because of inventing the fitness-checking system, especially the regular fitness checking system of the officers that's serves their health promotion (Pásztor et al. 2005, Szabó et al. 2005)

the compulsory tests that should be taken and their individual and summarized analysis provides us continuously the possibility of exploring and follow up the mental health state of the employees and the whole organization and through these it also provides the opportunity for researching the staff's stress-load, its characteristics and background in a scientific way.

This study is also a good example for this, where – from the several theory connected to the relationship between health and work – Karasek's *Workload- Control- Support* model has been chosen (Karasek et al. 1990) as a theoretical basis, that was also recommended by the WHO. The workload from the model has been described with the work related stress factors generally and with their special relations to the police specifically. It has been approved by several studies (Atkinson, 1999; Johnson, 2005; Violanti, 2009) that the work of the police officers is more stressful than the other professions. According to Cooper and his workmates' (1978, 1988, 1987) stress-list, from the most burdening stress-load factors it is the specificity of the tasks of the police officers that emerges: criminal acts, law enforcement, the special human and objective source requirements of the protection of public safety and transportation, the high complexity of the policeman role (Szabó, 2003, 2004, 2004, 2005), the changes aiming the development of the organization (cut-backs, realignments), the extended accommodation to the costumers needs (Csernyikné P. Á., 2005), the more and more result orientated attitude of the leaders that enforces to qualify services that are hard to qualify such as the feeling of safety. These characteristics accomplished by the law financial and moral reputation of the policeman's work can easily lead to the burn out of the police officers (Fekete, 1991) – according to the newest theory of Maslach and Leiter (2001) where burn-out merges from the constant disorders between the individual and his working environment (workload, control, reward, values, community, fair treatment). Besides the approved high stress-load of the policeman's work, the subjective experienced stress and expressed stress shows wide variety depending on the individual. The level of experienced and the perceived stress depends on several individual and organizational characteristics. From these ones I will analyze in details the single and complex effect of gender, social support (from the aspect of marital status and the workplace's atmosphere) and the status (leader or subordinated). I will put the phases on the balance between work and private life that's in focus in nowadays' researches, their influence on each other, on their lack of balance and its possible consequences where I've used Bronfennbrenner's ecological system-theory as basis (Grzywacz et al. 2000; Kobarik et al. 2008).

2. METHODS

In order to explore the characteristics of perceived stress of the police officers caused by the duty, especially its relation to gender (male, female), marital status (single, living together with someone), status (officer, warrant officer) and the number of years being in duty as time factor, I have used the data collected from the tests, that have been ordered to be filled out at the annual fitness-checking: the *Exploration Questionnaire*, and the *Work-related Stress Questionnaire of the Law enforcement Agencies (RMSK)* developed and standardized specially for and on this population. The demographic data (gender, marital status, status, years in duty, date of examination) come from the *Exploration Questionnaire*, the *RMSK* has been used for collecting data of perceived stress (Szabó et al, 2005).

The RMSK questionnaire consists of two main parts, one of them connected to the workplace, work as the list of events at work, workload, the other part is connected to the individual and his related characteristics, such as: physical status, locus of control, A-B personality, activity and motivation, satisfaction with workplace, support and stress-handling. Each item is evaluated on a six rate Likert –scale except in the case of the list of events at the workplace, where the tested person should only evaluate those items that had happened to him in the last year. In my analysis I have used the values of the RMSK's six main factors – containing items connected to workload and satisfaction with work- the 14 items measuring satisfaction with work, the values of factor measuring physical status, activity at workplace and motivation (*2nd table*).

2nd table: The examined factors of the RMSK and their reliability

THE EXAMINED MAIN FACTORS AND THEIR RELIABILITY (Cronbach's α)		THE EXAMINED SUBFACTORS CONNECTED TO THE WORKLOAD AND THEIR RELIABILITY (Cronbach's α)	
I. The subjective evaluation of workload	0,926	I.1 The judgment of the workplace's comfort	0,776
II. Workload coming from the organization's characteristics	0,858	I.2 The judgment of the working time and schedule	0,783
III. Role conflict coming from the work itself	0,915	I.3 The effective workload	0,916
IV. The subjective judgment of the workplace's atmosphere	0,928	II.2 The ethical aspect of work	(one item)
V. Subjective judgment of the leadership	0,920	II.3 Judgment of financial reward for the work	0,733
VI. The complex judgment of workload	0,977	II.4 Judgment of the organization's expectations	0,837
Physical condition	0,832	III.2 Judgment of individual responsibility	0,90
Activity at work and motivation altogether	0,736	III.3 Position in the organization	0,884

The analyzed 3980 questionnaire came from two county police headquarters (Fejér county and Veszprém county) and from the Readiness Police (the special police forces) 2987 per-

sons, from 2001-2008. The distribution of the sample could be considered representative from the aspect of gender and status of the Police and the agencies taking part in the examination. (*3rd table*).

3rd table: Distribution of the sample according to gender and status

DEPARTMENT OF THE ORGANIZATION		GENDER			STATUS		
		Male	Female	Sum	Warrant officer	Officer	Sum
Fejér County Police Headquarters	Headcount	1649	301	1950	1341	608	1949
	Percent of department of organization %	84,6%	15,4%		68,8%	31,2%	
	Percentage altogether %	42,2%	7,7%		33,7%	15,3%	
Veszprém County Police Headquarters	Headcount	895	172	1067	726	340	1066
	Percent of department of organization %	83,9%	16,1%		68,1%	31,9%	
	Percentage altogether %	22,9%	4,4%		18,3%	8,6%	
Readiness Police	Headcount	809	81	890	886	74	960
	Percent of department of organization %	90,9%	9,1%		92,3%	7,7%	
	Percentage altogether %	20,7%	2,1%		22,3%	1,9%	
SUM	Headcount	3353	554	3907	2953	1022	3975
	Percentage altogether %	85,8%	14,2%		74,3%	25,7%	

The statistical analysis could be divided into three main parts – after the descriptive statistics of the data collected from the different departments of the organization. In the first part after the detailed analysis of the stress-load profile of the whole sample – this contains the single factors of work-load, items of satisfaction with workplace and their compare and the results of scale of events at the workplace – I’ve analyzed the effect of gender (male/female), status (officer/warrant officer) and the marital status (single, living together with someone) to the stress-factors of the workplace and to the satisfaction with the workplace.

In the second part I’ve examined the effect of years spent as a member of organization considering the so called “determinative years”: between 2 and 25 years every year have been compared as a point of determination, where the two groups for comparing were formed by those ones who have spent that year in the organization and those ones who not, so they could be compared along the examined items. Doing this I could share the stress-load at the workplace, the activity at the workplace strongly connected to it, motivation at the workplace, the changes in the physical status with time as a result of several statistic tests to the whole sample, besides this, this could be done separately in the group of warrant officers and officers which are highly distinguishable after their results.

The third and the last part of the examination the longitudinal analysis – the longitudinal collecting of data and their appropriate coding made it possible – where I have analyzed 1126 pairs o questionnaires from 865 individuals from several different aspects.

First I have compared the factor-results of data collected from the questionnaires have been taken at two different phase – by the whole group, as well as by subgroups at most 10 years and more than 15 years on duty – in order to explore if the increased level of stress-load could be perceived parallel with time spent in the organization. Secondly I have examined the effect of the years passed by between the two phase of testing, with the compared separate analysis of those groups where the years passed by between the two phases of testing were more (1 to 5 years) or less (2 or 6 years) than the chosen differentiating year.

In order to analyze the data I have applied the non-parametric tests, after testing the data's normality, where I have used the SPSS 15.0 program pack.

3. RESULTS

My examination could be considered outstanding in the history of the Hungarian Republic's Police from the aspect of the sample's size, the interval of examination and the comprehensiveness of its questions. The results could be concise the following:

- I. The police officers are satisfied with their work, tasks and workmates and this is especially true for the colleagues in officer status. But they are more unsatisfied with those leaders and organizational circumstances where they have to work with. This examination -harmonized with the international results- has also proved that the stressors connected to the working circumstances are more burdening for the police officers than the stressors directly connected to the task itself. From the aspect of the working circumstances the deficiencies of the financial appreciation and the comfort of the workplace that have emerged. Besides this we must mention the problems with the social environment that could moderate the burdening effect of the work according to Karasek's work-load – control – support model and gives a stabile background to the everyday work.
- II. We can draw the conclusion that - considering the three examined demographic data and their effect to the stress-load profile- our results are in harmony with the related theories and the international scientific results.
 1. The results of this examination proved, similarly to Kirkcaldy (1998) and McCarty's (2007) from England, that there are no real big differences connected to gender from the aspect of perceived stress-load's profile, but the characteristics of the gender shades it, so the sex role differences could be perceived. The burdening effects of the *deficiencies in the financial appreciation*

– probably because of the family man role – is perceived more harder by men than women and the higher *individual responsibility* coming from the characteristics of policeman's work causes more perceived stress-load for women than men.

2. My results as shown proved the equality of men and women in practice in the organization of Hungarian Republic's Police and disclaimed several theories just like Violanti's that assumes that women's stress-load at the Police is not only different but harder because of the masculine nature of the police-work. The taking care of the family members and the household work only added to that. My results are seem to be more proving that taking care of your partner and your family is strengthening the stress-load not only by women by generally. This is especially true for the deficiencies in the financial appreciation - that has a direct effect to family's living standard- and to all other items that has a connection to family life and the time and energy spent with them, such as: stronger workload and organizational expectations, less supporting leader's attitude, etc.. This is partly in harmony with Grzywacz és Marks's (2000) results where the higher work related stress – that is generally true for the police officers according to this examination's results – strengthens the negative effect of private life's to work. Moreover this is independent to gender, which is disclaiming Pleck's asymmetric border hypothesis (Grzywacz et al, 2000; Kobarik et al., 2008).
3. The effect of rank makes it more differentiated. It won't cause dramatic changes in the shape of the perceived stress-load profile and the altogether value of stress-load, but it leads to high differences between the group officers and warrant officers. The officers are more critical with the organization of the Police and feel their work-load more burdening, but generally they are more satisfied with their work and appreciation than the warrant officers who are less caring for the problems of the organization. They are less satisfied with their work, working circumstances and appreciation, this is in harmony with their results that show more stress-load from deficiencies in the financial appreciation and the working circumstances – which are objective factors –. The officers besides their work-load feel their individual responsibility and the or-

ganizational expectations more burdening that probably comes from the leader status they working in.

4. As a conclusion we can say that my results proved the existence of special leader status related stress factors - that is in harmony with the examination's theoretical basis – such as responsibility, work-load from the task itself, and the higher expectation of the organization, that could be perceived by the officers who are in some kind of leader status. These results –in harmony with my hypothesis are also seem to be disclaiming the assumption – that is based on the theory of manager-illness – that the leader status causes higher stress-load level compared with the subordinated group.
5. Coming from these results gender, status and marital status's effect together from the aspect of work related stress the warrant officers living together with someone are in the worst position. In their case, the deficiencies in the financial appreciation - that factor is on top by everyone – causes the highest stress, that is accompanied by the burdening effect of leadership. This is especially true for those men who are in the role of family man.

III. My results connected to work related stress-load changing over time are in harmony with Violanti's results (Violanti et al. 1995, Bailey, 1995) – that is there's a higher stress-load in the first 10-15 years especially connected to concrete workload, the organizational characteristics of the police, and the stressors coming from the social environment (colleagues, leaders) that is followed by a stagnation and in a decline in some cases. This results seem to be referring to an turned down U shape connection between the level of work-related stress and the years spent in duty, that are more different in the group of officers and warrant officers:

1. It could be considered an approved statement – in the case of the warrant officers - that the more years the individual have stayed in duty the higher the level of stress –load coming mostly from the working circumstances. Besides these with the years passing by we can experience the weaker work-motivation, lower activity at the workplace and a higher number of physical illnesses, that are also more serious in symptoms.
2. This connection s not so evident in the case of officers. It is common by them – when they start their carrier – mostly connected to their tasks to have higher

level of stress than the warrant officers. This level decreases with time as they learn their tasks and manage to adapt themselves successfully into the organization. Moreover it's typical that after staying 15-20 years or more in the organization work-load starts to show some decline by the officers.

IV. There could be several recommendations and statements done - based on my results - to the aspect of psychological provision of the Hungarian Republic's Police firstly to the psychological fitness checking system where I would emphasize the followings:

1. The factors of the RMSK, that has been invented for measuring the individuals' stress-load at the periodic psychological fitness checking, are working reliably. They could be used effectively for measuring both the individual's both the organization's state of stress-load at the workplace.
2. The changes in the level of stress-load shows major growth in the first 10-15 years of duty that puts up the need of a modification in the scheduling of the periodic psychological fitness-checking, so there's a need of oftener examinations in the first years and a reduction after it.
3. It's worth differentiating between the officers and the warrant officers. Because of the higher level of entering stress in the first 1-2 years we should focus on the officers, and after it we should pay more attention to the warrant officers because of their continuous increasing of stress-level and the approaching of establishing a family that increases their level of stress more.
4. The experienced level of stress could be lessen by the increase of financial appreciation, by the increase of acceptance of the differences between the officers and the warrant officers for both groups, by the development of working circumstances and by the revise of working comfort.

V. My results detailed above are putting up several questions that are motivating for further researches. It would be interesting to examine the changes of stress-load and its relation to gender and marital status. It would be important to clarify the connection of work related stress-load and personality that involves the detailed examination of coping and the

disclose of its background. For the facilitation of the everyday work, it would be useful to implant these results – maybe with the development of the RMSK – into the Police’s psychological fitness checking system.

4. PUBLICATIONS

Publications connected to the subject of the thesis:

1. Szabó E., Rigó B. (2005): A munkahelyi stresszmegterhelés sajátosságai a rendőrség hivatásos állományának körében. *Alkalmazott Pszichológia*; VII. évfolyam 3. szám, Budapest, (15-29.o.)
2. Szabó E. (2005): Minőség és Rendőrség – a rendőrségi pszichológus szemével, *Pécsi Határőr Tudományos Közlemények* IV. szám, Pécs, (295-297.o.)
3. Szabó E. (2004): Emberkereskedelem és embercsempészet – a rendőrségi pszichológus szemével, *Pécsi Határőr Tudományos Közlemények* III. szám, Pécs, (265-267.o.)
4. Szabó E. (2004): Áldozatvédelem a rendőrség és a rendőrségi pszichológus szemszögéből. *Belügyi Szemle*, 2004/6. szám, Belügyminisztérium, Budapest, (81-95.o.)
5. Szabó E. (2003): Bűnmegelőzés és áldozatvédelem a rendőrségi pszichológus szemével, *Pécsi Határőr Tudományos Közlemények* II. szám, Pécs, (109-120.o.)
6. Hauser P., Hanzély Z., Domokos M., Szabó E., Barna G., Sebestyén A., Jeney András, Schuler D., Fekete Gy., Garami M. (2009): Effect of somatostatin analogue octreotide in medulloblastoma in xenograft and cell culture study. *Pediatric Hematology and Oncology*, 26:363–374.
7. Hauser P., Hanzély Z., Jakab Zs., Oláh Lászlóné, Szabó E., Jeney András, Schuler D., Fekete Gy., Bognár L., Garami M. (2006): Expression and Prognostic Examination of Heat Shock Proteins (HSP 27, HSP 70, and HSP 90) in Medulloblastoma. *J Pediatr Hematol Oncol.* 28:461-466.

Book chapters to the subject of the thesis:

1. Szabó E. (2006): Munkahelyi egészségpszichológia a megváltozott munkaképességű személyek alkalmazásában. In: Münnich Á. (szerk.) *Pszichológiai szempontok a megváltozott munkaképességű emberek munkaerőpiaci integrációjának elősegítéséhez.* (159-224) Didakt Kiadó, Debrecen.

Further publications:

1. Brozsek A., Szabó E. (2007): Problémák a tapasztalatok tükrében – értelmi sérült, látássérült, hallássérült munkavállalók a nyílt munkaerőpiacon, In: Münnich Á. (szerk.) *Gyakorlati megfontolások és kutatási tapasztalatok a megváltozott munkaképességű emberek foglalkoztatásához.* (357-407) Didakt Kiadó, Debrecen.