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## CRIMINAL GEOGRAPHICAL JOURNAL

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ACADEMIC AND APPLIED RESEARCH IN CRIMINAL GEOGRAPHY SCIENCE

VOLUME II / NUMBER 3-4 / DECEMBER 2020



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**THE HISTORY OF THE ORGANIZATIONAL EFFICIENCY  
MEASUREMENT OF THE POLICE IN HUNGARY****Abstract**

In my study I intend to present the endeavour to improve efficiency and introduce the current model for its measurement. I attempt to analyse the disadvantageous effect of linking performance measurement to statistics-based efficiency measurement on the organizational culture and work ethic of the police, thus influencing the subjective feeling of safety of the society.

**Keywords:** organizational efficiency, police, performance, work culture, organization

**1. Introduction**

Hungarian statisticians quickly recognised the potential lying in criminal statistics: without the information and patterns hidden in the data of criminal statistics the state is unable to do anything against crime (Domokos 2013, 64). The efficiency quotient was based on criminal statistics and it has become the most important indicator showcasing the quality of the system. The reciprocal of efficiency exposes the ratio of inner variables to one another, especially in the simplified relation of investment and profit. Moreover, it shows the integrity of implicit and explicit factors by inserting the whole system into an external environment. When measuring the efficiency of criminal investigation, we examine the operation of a complex system; in case of incorrect fundamental assumptions, the results, if applied to the system, can cause its structural and functional disorder.

An outcome oriented approach can cause the weakening of the formal and informal facets of the organization. As a consequence, in contradiction to its original intention, measuring efficiency can lead to the demotivation and demoralization of the criminal investigation

organization, and instead of strengthening its structure and functionality, the opposite outcome occurs.

In this way measuring efficiency can lead to the refusal or questioning of criminal investigation indicators and indices. Not recognizing the real nature of effects is an “ostrichism”, which attempts to evade or dodge objective statistical indicators. It does not take into consideration that criminal investigation is a complex system based on several factors, the efficiency of which is almost impossible to be expressed in simple figures.

As a result, delivering the expected figures becomes the sole measure of performance of the organization and the system itself. Delivering these figures at all costs practically becomes more important than fulfilling the fundamental governmental and social function of the organization. Therefore it is essential to lay down certain principles which might ensure the theoretical basis for the enforcement of these ‘objective’ figures.

They can be objected not only because they are old-fashioned or represent a different kind of mentality, but because they represent a factual and serious obstacle for development.

## **2. Seeking the Ways and Means of Efficiency in the 80s**

The Hungarian Great Encyclopaedia defines efficiency as follows: “1. the ratio of output and input. Depending on the type of input, different efficiency indicators can be created, e.g. efficiency of material consumption, the capital (inverse of capital intensity, i.e. the quotient of capital and production), and productivity (inverse of labour intensity). Complex indicators can also be produced, which include all the (factors) inputs, in case of fixed or convertible inputs, or in case of those inputs which can be expressed in mutual units of measure. 2. evaluation deriving from the comparison of production processes which can be described with diverse, not commensurable outputs. One procedure is more efficient than another, if, for the same output (combination), it uses less of at least one of the inputs, while from the other inputs it does not use more; respectively, with the same input combination it results in more output in case of at least one of the outputs, while the others remains unchanged (vectorial comparison). In this respect procedures are efficient if more efficient procedures do not exist.” (Hungarian Great Encyclopaedia 1999, 275.)

Some police researchers approached the question of efficiency in the 80s based on the above given definition. They were aware of the existence of latent crime, and although they accepted that total crime included latent crime, they could not count with it when measuring efficiency.

The criminal investigation authorities set the theoretically possible maximum as the benchmark, and not total crime which includes latent crime, too.

In case of criminal investigation, efficiency is nothing but a ratio which includes the volume of labour input, the work load and the achieved result, where the result is weighted by the danger to society and refers to recorded crimes, and where the volume of labour input and work load is determined by the complex system of several factors (Somogyi –Vass – Madács 1979). The new indicator evaluates the activities of the criminal investigation authority regulated by the Criminal Procedure Law; other activities are not included. The categorization of certain crimes was based on the average court sentences and Penal Code sanctions, which resulted in a “danger to society indicator”; nevertheless, this efficiency formula didn’t go further than surveying and indexing the regional characteristics of the criminal situation (Somogyi – Vass – Madács 1979).

*Somogyi, Vass and Madách* focused their research on the question whether the labour input of the police reflected the judicial system’s (i.e. court decisions) imposed average sentence in relation to certain crimes. When defining efficiency, they did not draw any conclusion besides indexing crimes; still, their results could show how the courts perceive crimes after criminal investigation, creating a ground for comparison. This way criminal investigation authorities could allocate work and organizational conditions better. If they wished get an objective picture of a given investigation authority’s efficiency, they could transfer the indexed crime numbers to the recorded crime data of the given authority, and compare the labour input of the organization to that data. However, they did not draft further recommendations as to how the system should be adapted or how labour input data should be obtained. Although establishing crime categories is a valid line of research, it does not provide enough information to define efficiency. They failed to point out, that the “danger to society” index does not reveal how complicated and time-consuming investigations and verifications are. In fact, only by indexing how time-consuming the verification process is (amount and nature of evidence) and how dangerous a certain crime to society is, can the priorities and the scope of authority of the criminal investigation organization be determined.

I fully agree with *Tauber István*’s contemporary reflection on the above mentioned research, who, while defining the efficiency of criminal investigation, strongly doubted that the work of criminal investigation can be measured. According to his view, the efficiency of the social function of crime prevention can only be defined through negative procedures, and only as a

tendency. With this method, latent crime is not considered assuming that it is less prevalent than recorded crime. I believe in Hungary this is the case.<sup>8</sup> “It is not the social perception of committed crimes that matters, but the labour intensity of the investigation and prosecution of various crimes. Of course, the social perception of a committed crime can also be considered, but only as an underlying characteristic feature.” (Tauber 1980, 62.)

In his efficiency theory *Tauber* created the following groups of factors:

1. Cases should be categorized on the basis of a point system according to how complex they are, how much data we have and the quality and type of the data etc. The types of cases can be indexed based on how much time needs to be devoted to them. The crimes might be assigned between 1–10 points.
2. The average investigation and verification activity done at a given type of crime. Personnel conditions of the examined police unit. Professional preparedness, practice and qualification is also rated.
3. Social perception of certain crimes, according to the type and size of the court sentence.

Tauber focuses on the cooperation of the criminal procedure’s subsystems from the point of view of efficiency, as he says: “Criminal prosecution requires the cooperation and coordination of different bodies, because efficient criminal investigation can only be imagined if all the bodies taking part in the criminal procedure strive for maximum performance.” (Tauber 1980, 59.)

However, maximum performance can be strongly questioned if the requirements for success differ in the subsystems. “The subsystems of open systems – like the judicial system – are interdependent; the certain subsystems are partly independent from each other, i.e. they are autonomous regarding their functions. Therefore they wish to preserve their independence, which can run counter to the endeavour and overall aim of the whole system. This also stands for the relation between certain elements, and conflicts between the subsystems can derive from the attempt of certain sub-systems to preserve their level of functional autonomy.” (Farkas 2002, 51.) “It is likely that while the given organization tries to maximize its own functional autonomy, it also endeavours to minimize that of other subsystems, which can cause tension and conflict between them.” (Connidis 1982, Farkas 2002)

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<sup>8</sup>At that time there was not an overall latency survey that is why the author supposes it. After the political change of 1989 Korinek László published data concerning Hungarian latent criminality.

In this question the relation system between the prosecution and the investigation authority is of cardinal importance, since criminal procedure has its activity management and operations management at different places, which is not negligible from the point of view of efficiency. “Operations control and activity control interact with each other. The latter depends on the former one. Operations control ensures the budget funds for the organization, it establishes the organization and its structure, takes decisions on the personnel, and it has an effect on the qualification of the workers. The high quality, legal activity and its control postulates the perfect control of operations. Otherwise functional disorders can occur in the field of law enforcement, the efficiency of activity control will be lower. Activity control is vulnerable to operation control; however, the law places the responsibility for controlling investigations on the attorney who controls the activity.” (Nyíri 2003, 65.)

*Tauber* uses the commonly accepted efficiency formula to calculate the efficiency of criminal investigations, while also considering factors which really influence the efficiency of the activity, such as:

- crime situation,
- quantity and quality of the caseload,
- time factors in the investigation,
- quantity, quality and successfulness of work,
- personnel and material conditions of the criminal investigation.

According to his viewpoint, the efficiency formula cannot be automatically applied to the field of criminal investigation, since defining and measuring “effective output and established output” is a complicated task, and the “social need” element of criminal investigation efficiency raises interpretation problems. His efficiency approach is much more chiselled than the former theory, which was flawed from the start. Still, in his assessment of efficiency he neglects the role of the the feeling of subjective safety and the significance of public opinion on the police. However, these aspects are indispensable to determine the efficiency of a modern police force, integrated into a society. *Korinek László*’s monograph ‘Fear of Crime’ was essential to promote this idea, but unfortunately he only published it well after the change of regime in 1995.



### 3. Measuring Efficiency in the 90s

*Dános Valér* conceived the evaluation of police work along three lines: measuring effectiveness, performance and efficiency:

- how well the police manages the resources at its disposal: human resource, budgetary funds and material infrastructure,
- performances compared to each other and their tendencies,
- meeting social expectations, changes in efficiency in relation to crime data (*Dános 2002*).

The medium-term research of Dr. univ. *Komáromi István* on measuring the efficiency of criminal investigation at the Pest County Police Headquarters in 1996 is also worth mentioning (*Komáromi-Teremi 1996*).

According to his views the development of a unified measuring system is still in the initial stages, calling for more research. Our current system, which is based on statistical data, is unfair; it does not account for the different working conditions of the authorities; it does not differentiate between the various types of crimes and offences, each crime counts as one. A further problem is that statistics, which is meant to provide objective results, do not correlate with the public's subjective feeling of safety. Different crimes have different effects on the public consciousness. *Komáromi*, being result oriented, prefers the objective approach, since subordinates cannot be blamed for lower efficiency if organizational aims are not in accordance with efficiency indices (*Komáromi-Teremi 1996*). Economic efficiency aims to achieve the most with as little effort and as few resources as possible. The outcome is the output itself. The index of efficiency is the quotient of input and output during a given period of time. After defining correctly the input and the output, they have to be converted to a commensurable unit of measurement. The measure of efficiency is not the same as the achieved result and different results can be compared thanks to efficiency measurement (*Komáromi-Teremi 1996*).

*Komáromi's* analysis and research is a serious advancement in defining efficiency. Nevertheless, his approach remained mainly statistical, and he failed to clarify several conceptual elements. Neither could he solve the efficiency dilemma between objective safety and subjective feeling of safety. The inner evaluation method of the variables in his system is rudimentary, therefore his system couldn't become a self-regulating coherent efficiency measurement system, since the variables can be changed arbitrarily.

Marvin E. *Wolfgang* and his colleagues conducted a similar research about how people see the seriousness of crimes and offences compared with each other. They came to the conclusion that when cases – and not offences (contrary to the Hungarian research) – were graded according to their seriousness, people based their decision on whether the victims were able to defend themselves, how big the loss or damage was, what type of firm or organization had been wronged, and what the relationship between the perpetrator and the victim was. Almost all the respondents agreed that white collar crimes are more serious than crimes against property (*Wolfgang-Figlio-Tracy-Singer 1985*).

#### **4. Measuring Efficiency in Practice**

By the mid-1990s it became obvious to certain police experts that the evaluation practice established for the crime situation in the 90s contained several dysfunctional elements. The common performance indicators used for evaluating the professional performance of the police was not suitable to measure the real performance of the given body (*Dormán 2002*). In 1997 a completely new evaluation system was presented to the leadership of the National Police Headquarters, and its trial implementation was decided upon. The system was to be introduced in three phases, first applying it to the data of three counties, than to five counties and finally to Pest County. The new evaluation system inevitably brought about positive changes. A lot of information, which was not demonstrated by the former statistical indicators, was revealed transforming the former efficiency indices:

- measurements regarding the density of police officers rearranged the order of ranking between the headquarters,
- police authorities could channel their forces better, after the prevalence of specific crimes became visible in the regional data,
- the expenses per criminal case ranking significantly rearranged the efficiency ranking.

The aspects of the new evaluation system became the following:

- Citizens and local governments became involved in the evaluation system through opinion polls.
- Combining traditional criminal statistical data with social statistical indices, e.g. certain type of crime incidences per 100 thousand people.
- Regional statistics are not compared to each other, but to the former period of time, revealing tendencies and changes.

- Creating weighted indices with nominal numbers based on the average sentences imposed according to the Penal Code.
- Using a clarifying index, which shows how many cases the police dealt with during a given period of time. It also contains cases closed but not solved.
- The human, material-technical and financial conditions of the given body, such as how much money and how many police officers they have, what their technical-equipment utilization is like, etc.

The whole system was to be introduced by 2003, but in the end it was not implemented. However, it started a way of thinking which led to the acknowledgement of the role of subjective feeling of safety.

### **5. Current Model for Measuring the Efficiency of Criminal Investigation<sup>9</sup>**

The 'efficiency' calculation method as the basis of performance evaluation

Efficiency, which is the aim of the directive, is closely linked to the performance evaluation of the organization.

The evaluation system of the set objectives uses 30 index numbers out of which:

- 20 are crimes
- 2 are offences
- 4 are related to public order
- 3 are related to traffic regulations
- 1 reflects the opinion of local governments (<http://prezi.com>).

The weighting of the index numbers

Not of extreme importance (1x):

1. the number of investigations per 1 policeman
2. the number of successful investigations per 1 policeman
3. the number of prosecution per 1 policeman
4. the efficiency index of investigating crimes committed in a public space
5. the efficiency index of investigating negligence to help
6. the efficiency index of investigating hit-and-run accidents

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<sup>9</sup> 18/2012. (X. 12.) ORFK Directive about the Procedure of Evaluation of County (Capital) Police Headquarters, Police Headquarters and Borderguard Offices Based on an Objective Measurement System

7. the efficiency index of investigating vandalism
8. the efficiency index of investigating vigilantism
9. the efficiency index of investigating cases involving private vehicles
10. the efficiency index of investigating arbitrary taking of vehicle
11. the efficiency index of investigating damage of property
12. the efficiency index of investigating plundering
13. solving offences against property committed by an unknown perpetrator
14. the rate of prosecution
15. the average time of the infringement procedure
16. hours spent in a public space per 1 policeman.

The weighting of index numbers:

Of increased importance (2x):

1. solving a crime committed by an unknown perpetrator
2. the number of crimes committed in a public place per 100.000 inhabitants
3. the rate of prosecution
4. the average time of investigating cases
5. the number of apprehensions per 1 policeman
6. the number of arrests per 1 policeman.

The weighting of index numbers:

Of increased importance (3):

1. solving homicide cases committed by an unknown perpetrator
2. the efficiency index of investigating theft
3. the efficiency index of investigating burglary
4. the efficiency index of investigating robbery
5. the change in the number of traffic accidents with injuries compared to an earlier period of time.

The weighting of index numbers:

Decisive (4x):

1. the number of registered crimes
2. the opinion of local governments.

## 6. Conclusions concerning the weighting of index numbers

The original significance of the different crimes (20 crimes, 2 offences, etc.) significantly changes after weighting, so it seems that the original rate is only a principle. On the other hand, there are common criminal statistical and other index numbers, which have no relation to either branch of service.

After the multiplication (weighting) there are 51 units from which the proportion of the different measure groups are the following:

- a., 9 of common criminal statistics,
- b., 28 concerning criminal service, 4 of which are connected to the criminal investigation capacity of the authority,
- c., 2 concerning traffic service,
- d., 2 concerning offences
- e., 6 concerning public order service,
- f., 4 reflecting the opinion of local governments.

The measure is dominated by the former (investigation) and the current (ITE)<sup>10</sup> performance indicators of certain crimes, that is, by the output statistics of criminal investigation. It is a positive development that the condition of the authority appears in the evaluation, however, it makes up for only 18% of the evaluation. The proportion of criminal tendency index numbers is also low in the measure: only 18% of the whole evaluation system. Moreover, it is a significant question whether empty positions and appointments are accounted for in the per capita values, since at these measures a reduced number of staff means higher efficiency. The proportion of the local government's opinion is also low in the measure (below 10%). Although the opinion of the local government is important, it is not equivalent with the public's feeling of safety, which does not appear in the evaluation at all. Furthermore, we do not get a picture on the rate of latent crime either.

Analysing the directive, one can declare that the evaluation is still largely based on statistics, while to a certain degree it also calculates with the workload of the authorities and with the figures of local crime, the change of which – we must add – is not always due to the effective

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<sup>10</sup> reconnaissance index in case of an unknown perpetrator

operation or activity of the investigation authority, but to several macro factors mentioned in my study. Unfortunately, efficiency measures do not reflect how effectively the police react to criminal tendencies, but rather focuses on the number and rate of files that the criminal investigation authority produces. Apart from this, the advantage of the directive is that it deals with authorities on the same level in a comparative way regarding their conditions; however, rates could have been weighted more, not to mention the necessity of representing the differences of local criminal 'characteristics'.

### **7. The Preconditions for Demonstrating 'Efficiency' in the Statistics of Criminal Investigation**

At a conceptual level, the separation and independent handling of crime and criminal investigation (and their effects) requires consideration. In fact, the authentic interpretation of the relation between the subjective approach to criminal investigation and crime and the objective figures of public safety is flawed because it is approached in a causal scheme. Crime is not the consequence of criminal investigation; in the causal chain neither of them fulfils the role of reason or result. In this way different institutional solutions and interventions which treat delinquency, no matter how strict they are, such as 'zero tolerance', wish to make a change via the tools of criminal investigation, meanwhile remaining within – the tight one-way causality – its uniformed formula (Sárosi 2008).

We have to realize that improving the quality and the credibility of the criminal investigation authority together with a growing confidence of the population has a bigger effect than simply fighting crime. It was also verified by researches, which, by analysing the results of opposing criminal investigation approaches, came to the conclusion that they transformed the criminal situation with very similar effectiveness (Harcourt 2001). However, criminological researches consistently verified the close relation and interaction between crime and criminal investigation. "Crime is a social phenomenon that is why its prevalence is the failure of the society not of criminal investigation. So crime is the result of social conditions, which itself creates other conditions like criminal investigation. Criminal investigation is meant to deal with the conditions created by crime being the most significant social institution to control crime. Its result or lack of success, i.e. its efficiency is in interaction with public safety, which nowadays cannot be measured with traditional methods at all. Even with the optimal investigation rates of the criminal investigation apparatus crime rates are increasing." (Szabó 2002, 34-36.)

The two subsystems, affecting and influencing each other, represent crime, therefore evaluating and emphasizing their conditions independently from each other is meaningless, inconsequent and does not assume a strategic aspect at all. Handling criminal investigation outside the scope of crime and using its statistics for research purposes leads to faulty results, which can encourage wrong conclusions. Crime can be handled solely in correlation with criminal investigation and social processes, where several factors must be considered, which can make the real nature of criminal investigation exact and intelligible. Such factors can be:

- Complex statistics integrated into society

When evaluating the quality of criminal investigation it is indispensable to know and reveal local social conditions and figures. Local unemployment, social stratification, standard of living and other significant macro factors can definitely create different expectations towards the police as a criminal investigation authority. At a national, county or local level the root cause of crime is the functional disorder of basic social processes which can be traced back to social disorganization, the weakening of social control, cultural conflicts or other anomalies (Szabó 1985).

- The opinion of local governments, civil organizations and churches

We must pay considerable attention to specifically local public safety requirements, since criminal investigation can be qualified as meeting these. If local government law enforcers work hand in hand and in active cooperation with civil public safety self-organizations, they can react more effectively to the local challenges of public safety.

- The basic unit of criminal investigation is the local body

The foundation of efficiency is the evaluation and measurement of local settlement units revealing its specific crime and criminal investigation situation. The national survey is not able to show and deal with the social, economic, cultural and other processes of smaller geographical units; which not only creates an opportunity to crime, but also motivates perpetrators (Déri 2000). Knowing the real quality and size of crime makes it possible to adapt the strategy of crime prevention and investigation; adjusting the organization, structure, division and location of the forces, while considering the tendencies and prediction of crime (Boge 1991).

## 8. Organization and Efficiency

Perhaps organizational uncertainty and mistrust is the most important factor decreasing efficiency. Unfortunately, for the past 25 years police officers have not been given guidelines as to what their social objective and task is. Only a negative definition was provided for the social role of the police force saying it is supposed to be different from what it used to be. Consequently, police officers only have a vague idea of what they should be, but do not know who they really are in a democracy (Krémer 2003). Therefore the police needed to develop a certain kind of defensive mechanism which can be described as faith in professionalism above all which lead to the full isolation from the critical society. This self-defence reflex was a consequence of the above mentioned and the fully developed uncertainty which dominated not only the vertical but also the horizontal level. It is also observable in the lack of information flow: the exchange of information occurs via informal ways to bypass the extremely regulated official channels, which has become an obstacle of confidence (Krémer – Molnár– Szakács–Valcsicsák 2010).

“The organization which reduces almost all of its members to the role of a servant, as a result of its hierarchical order, risks losing all of its ability to co-operate with its external contacts, and practically speaking regards its whole surroundings as an enemy. Someone belonging to the organization can pass the surrounding all the humiliation and affront they are forced to bear inside the organization.” (Finszter 2006, 648.) This claim expressively points to the problems coming from the structural disorders.

Deprivation of the organizational culture strongly correlates with the bad situation of the workforce. It has been already examined by the ombudsman who also issued several statements.<sup>11</sup> The characteristic features of the police are the following: exploitation, overwork, personal needs are not considered, no police association, no social scenes, no traditions and customs to foster, no control, no supervision helping the operation, crime is considered a moral defect, which is reflected in the measures, and statistics do not provide a faithful picture of the operation of the police (Németh 2007).

Difficult economic circumstances do not help successful work either, since it is a problem to find funds for the operation; most regional bodies keep struggling with debts. Human resources

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<sup>11</sup> The Ombudsman’s Report about the Situation of Human Rights of Policemen: OBH 5007/1997.



are scarce. Several regional bodies operate in buildings which were designed for other purposes therefore they are outdated and not practical at all (Salgó 2004).

### **9. Principles and Methods for Measuring Performance**

The managerial concept of performance mostly focuses on the financial efficiency of the organization and endeavours to reach higher efficiency by improving the management of human resources. If the loyalty of the employees is increased and higher performance is promoted, the whole organization's efficiency is affected. There is no doubt that the functional expenses are significantly increased because of the training costs caused by high fluctuation, since the quality and speed of work is closely related to the qualification, working capacity and motivation of the employees.

Performance expectations, personal and professional competence requirements towards colleagues on duty in the criminal investigation branch of service are completely different from other branches of service at the police. They resemble a market-oriented service company rather than a public institution. The driving force that inspires performance is first of all the motivation of human resources. Regarding its nature and meaning, several theories have been created, but its essence can be grasped in the leader's behaviour towards their subordinates in order to entice them to reach the organizational aims (Pedagogy and Psychology Studies for Police Management, 2009). Encouragement is different from motivation, which is essentially external, but also includes internal feelings, which are generated when good performance is reached (Gelei 2006).

Performance evaluation is a means of incitement and motivation. As an inherent part of organizational life participants mutually evaluate each other's performance, as their shared aim is the success and efficiency of the whole organization. Two methods of evaluation are distinguished:

- informal evaluation, it happens spontaneously because leaders pay close attention to their employees' work and they evaluate it (Gyökér 2007). It is subjective and based on an opinion.
- formal evaluation, a consciously developed system by the organization; with the help of this system the employees' performances are regularly and systematically evaluated.

The performance evaluation of criminal investigation is a completely formal, paper-generating activity without any motivational force; moreover, it is far from reality in many cases.

Individual performance evaluation and organizational efficiency targets should be synchronized; still the statistical indices showing the efficiency of the organization have no significance in measuring the performance of the criminal service. Annual performance targets or the actually completed and finished tasks do not occur on either the quality or the quantity side of the employees' incentive system (Kiss 2011). First of all, the contradicting situation of uncertainty and inertia must be eliminated in order to make performance evaluation motivating. It is connected to the fact that organizational efficiency is unclear and immature. Subjectivity cannot be eliminated; however, it must be expressed in the leaders' expectations in accordance with the general objectives of the organization. Apart from this, all the objective elements of the evaluation system must be laid down in order to obtain a tangible performance measurement system.

In terms of loyalty and performance incentive, the most significant aim is achieving motivation. As can be inferred from the above, motivation, besides implementing a result oriented approach, can also be encouraged by eliminating continuous overwork, rationalizing excessive expectations and division of labour, ensuring rehabilitation and relaxation, and making it possible for colleagues to spend more time on themselves and their families both physically and mentally. By doing this, instead of enforcing a result-oriented motivation system, the workforce would have the proper background and energy, which would certainly manifest itself in the standard of work and also in the results.

## 10. Measuring Efficiency and Performance

In accordance with the notion of efficiency expounded above, the following aspects should be considered when developing the method of performance evaluation of law enforcement employess:

- the number of operations, including executed investigation actions,
- the number of solved cases (perpetrators and crimes),
- the number of dissolved and suspended cases,
- the number of cases passed on to prosecution,
- weighting the investigation difficulty of cases based on the crime and the concrete case, which would be a "prequalification" from the leader
- the period of time spent on certain investigation activities in proportion to the working hours in the given period of time,
- the rate of decisions rejected by prosecution, the same in case of supplementary investigations, compared with the number of investigations in process,

- the number of commander revisions, and the quantity and quality of the discovered deficiencies, etc.

The listed aspects of evaluation are not complete and they may vary according to the sphere of activity, nevertheless, it can be seen quite well that a performance evaluation system developed in accordance with organizational efficiency, could basically change the functional system of the organization and would steer it towards the direction of efficiency.

Selection, recruiting and training as part of human resources are also affected by the lack of a clear view of efficiency. Obviously, an organization which struggles with the challenge of efficiency and performance evaluation will not manage workforce optimally either.<sup>12</sup> The symptoms appear from selection to employing, and let there be no mistake, they cannot be reduced to only an economic question. An effective selection and incentive system can be set up even from little money if there is a properly motivated workforce with good competences at the beginning and if a healthy incentive and career system is ensured during their whole career and advancement. "It can be definitely stated, that the expense of training and equipping an unsuitable person, and the negative financial consequences of their improper actions, (...) the allowances in connection with their discharge, cost several times more than the expenses of an aptitude test." (Csatai 2010, 97.)

Measuring performance is significant for the efficiency of criminal investigation, because through increasing individual performances the whole system is developing. To achieve this, there has to be a harmony between the long term and short term objectives of the organization and between the objectives of the branches. Management theory provides a scientific approach as to how this should be carried out, defining the advantages of modern management principles and methods, and explaining the means to increase performance motivation.

A relevant performance survey at the police contains:

- a committed management,
- an active participation of the subordinates,
- consistent endeavour,
- regular appreciation,

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<sup>12</sup> A consequent performance evaluation system is needed and also a system of taking responsibility which puts requirements in the centre. Statistic approach must be given up, as it is a scientifically proved fact that it does not show real values. Measuring performance must be set to competences. As a consequence of it, positions must be given according to ranks, it is also true in reverse. Indicators for measuring performance can be people's feedback and local and national researches done regularly. (Kr mer-Moln r-Szak cs-Valcsics k, 2010).

- consistency in the rewarding system,
- adequate and regular trainings to improve the necessary skills.

If the organization wants to operate successfully, it has to establish a culture which appreciates effort by concentrating on results and performance. All this helps to establish the adequate performance-centric culture based on endeavour (Morgan 1995). “It is not accidental that, similar to several other fields of life, inadequate measurement of results causes disorders in case of the police too, since such an unambiguous and uniform measure and index of success is missing which could show the real efficiency of police work. (...) This led to there, that police leaders exclusively saw the solution in increasing the number of police forces and equipment; they required more and better policemen and technology. This deformed conception which is missing the point made it difficult to clear up and understand the nature of police work and performance measurement.” (Dános 1995, 129.) The crime-case solution index cannot be the basis for performance evaluation; its use deliberately misleads society, public opinion and citizens, and at the same time it is a self-deception to overemphasize its importance in the system of performance evaluation (Finszter 2008).

The impracticality of using the crime-case solution index lies in the interaction between cause and effect, since public safety is the aggregate of objective factors and phenomena, which are also significantly influenced by the efficiency and result-oriented approach of the criminal investigation. The crime prevalence index, since ignoring the macro structural elements of social relations, is not suitable for comparison.

To sum it up, objective criminal investigation indices are unsuitable for performance evaluation since:

- There is no causal relation between performance and these indices; e.g. the inverse proportionality between crime solution indices and crime prevalence cannot be measured or verified. It means that the improving crime case solution indices do not necessarily reflect the improvement of the crime situation, they simply show that the activity of criminal investigation has increased. E.g. if crime indices have increased = public safety has deteriorated = the police have worked badly. On the other hand, if the same happens in case of a hidden crime (drunk driving, family abuse, etc.), we can surely state that the efficiency of the criminal investigation body has increased (Kertész 2002).

- The crime situation, i.e. the objective safety is the result of complex factors, which depend on the efficiency of the criminal investigation to a great extent; the role and effect of criminal investigation, that is the procesual and regressive model cannot be measured or separated from the effect of the proactive model. Only the separated measurement of these two could explain the necessity of their use.
- The crime rate data does not consider important factors, such as the composition of the population or the structure of crime.

According to *Dános*, goal setting reveals the vision and the basic philosophy of the police, which determines the leading motive of the activities of the whole police force, its units and its members. The quantitative indices of the measurement must be in harmony with the most fundamental aims of the police; the close interaction between them must be thoroughly examined.

As far as community goals are concerned, first of all the indices of contentment must be taken into consideration. The indices of case solving and successful investigations provide only an indirect and deformed picture of how successfully the police work. As if the success of legislation lay in the number of acts passed each year instead of their social effects. Similarly, the criminal investigation authorities of the state are successful if they produce the least possible data, and they guarantee social peace and public safety. Guaranteeing objective safety (negative criminal investigation indices) is only important as far as they increase the subjective feeling of safety and reveal the fight against hidden crime.

Concluding from the above described, we can declare that the connection between the number of staff and the success of criminal investigation is extremely distant ().<sup>13</sup> Difficult economic circumstances do not help successful work; often it is difficult to find the funds for operation and most regional bodies keep struggling with debts. Human resources are scarce. Several regional bodies operate in buildings which were designed for other purposes; therefore they are outdated and not practical at all (Salgó 2004, 41-51.). The same can be said about the presence of the police, as in most of the cases the procedure starts on the initiative of the population. The

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<sup>13</sup> In the United States between 1970 and 1990, the number of policeman increased with, 70,7% and the number of serious crimes increased with 78,8%, the number of violent crime increased with 147%. In Great Britain from 1977 to 1990 beside the 12% increase in the number of staff there was a 67% growth in the number of crimes. In Canada from 1970 to 1990 there were 16% more policemen meanwhile criminal statistics showed 34% increase. In 1990 in the United States there were 393 inhabitants per 1 policeman, in Japan 552. In the same year 100 000 inhabitants had to bear 728 violent crimes in the USA, while in Japan less than 10. (Kozáry, 2008)

increase of social solidarity has a positive effect on the inputs of criminal investigation, since the increase of interaction is a question of confidence. Open communication channels, i.e. the possibility of sincere and free information exchange between policemen and citizens, are of extreme importance. However, communication is strongly limited due to the bureaucracy and hierarchical relations. Police communication can be characterized by passivity at best, caused by the fear of the sensation-hungry and news-distorting attitude of the media. It culminates in the complete chaos of how communication rights are delegated, especially on the lower level of the hierarchy at local bodies, where such decisions are regulated by strict and formal rules. However, if the community feels that meeting performance indices made up by the criminal investigation authority is more important than the outcome of authentic and correct satisfaction surveys coming directly from the community itself and the objective feedback of performance evaluation, then its attitude will significantly change. It is misleading to generate “objective” statistical performance indices instead of working for community objectives (Bujdosó-Györki 2011).

Starting from the interpretation of police philosophy, the objective situation of safety and the subjective feeling of safety need to be defined with great precision. We can distinguish between performance and efficiency measurement, the former can be the basis of bonuses, appreciation or advancement, the other can have an effect on resources, means and methods, principles, activities and functional characteristics of practically the whole organization.

We must make sure that (either centrally or locally) set aims are reached. This activity can be described as measuring general police efficiency. Where the set aims have been reached, the resources used for reaching the aims have to be evaluated, then decide whether they were excessive or not. Another factor must be considered, namely the ‘profitability’ of the organization in terms of expenses. This is another kind of efficiency measurement or survey to reveal how much loss there is, how much time and energy have been wasted. The ratio between results and methods must be considered here (Skuli 1995).

The crime solving index is also paramount in evaluating the performance of the organization, but while it highlights the successfully closed cases, it ignores unsuccessful activities and wasted working hours. Therefore it is important to assess how much time is spent on a case, i.e. how long it takes to produce a report, furthermore how much time is spent on processing cases either successful or unsuccessful. The reasons for stopping investigations can be further detailed revealing how many working hours and how much energy input the authority needs to achieve

its success indices. Trends of certain activities must be analysed and all the legislative or law enforcement anomalies must be uncovered, in this way the work load conditions of successful and unsuccessful procedures become detectable. The robocop system records all the investigation activities; these electronic records can uncover the relations between work load and the number of staff providing an insight into the nature of efficiency. We must pay attention to the fact that only the results of similar police bodies can be compared and evaluated drawing conclusions from them. A clear advantage of the revision is that standard figures can be established, which reveal the time-scale of various working processes, and highlight more clearly the relations between administration load and success.

The disadvantages of using criminal investigation statistics for performance evaluation have been presented in several studies. Its problems mainly appear in its inadequacy to reflect latent crime. It is improperly connected to the quality of work and to the salary system, which creates serious contradictions and dissatisfaction inside the organization (Kádár 1967).

The more efficient German criminal investigation system evaluates the changes and tendencies in the crime scene. Police management, both at higher and lower levels, reacts to the dynamically changing face of crime with flexible measures. On local levels it means strengthening the patrol and surveillance service, organizing large-scale public safety actions and raids, and establishing different special investigation teams, for which workforce is taken from other fields (Ziegler 1995).

## 11. Conclusion

On the basis of the above considerations it can be safely stated that basing performance evaluation on “objective” criminal investigation statistical data, does not correlate with the original objective of improving the efficiency of criminal investigation. This paradigm disregards strategic thinking and does not examine crime and crime control with a scientific approach. It also fails to perceive crime as a social phenomenon and criminal investigation as an institutional means reacting to it. Moreover, it has a negative effect on the motivation / incentive system of the organization by serving ad-hock purposes and thus alienating the society. Criminal investigation cannot be handled separately from crime and society as a hierarchically controlled system.

There is no question that the objective indices of criminal statistics are too complicated to completely exclude the possibility of their manipulation if they are connected to performance evaluation. The efficiency indicator is especially important in moving away from quantity towards quality. The subjective feeling of safety as an efficiency factor must be acknowledged and included in the system. That is, gaining the confidence of the people and the community should be as essential as producing a more successful criminal investigation index from a lower budget.

The efficiency of a community type police integrated into society, measured with the “objective” indices of criminal statistics is an antagonism in itself. This contradiction can be solved in two ways. First we could take a cost efficiency approach (market based, neoliberal) deceiving ourselves and the citizens with favouring statistics. Or with the help of a new model we could create an organizational culture, which appreciates human resources, making them more efficient with incentives and a fair performance evaluation system.

### References

- ADLER, FRED A – MUELLER, GERHARD O. W. – LAUFER, WILLIAM S. (2000): Criminology. Budapest, Osiris
- ADLER, FRED A – MUELLER, GERHARD O.W. – LAUFER, WILLIAM S. (2000): Kriminológia, Osiris
- ALBRECHT, HANS-JÖRG (2010): Safety and Crime Prevention. In: Criminology Studies, 47.
- ALBRECHT, HANS-JÖRG (2010): Biztonság és bűnmegelőzés. In: Kriminológiai tanulmányok 47. szám
- BOGE, HEINRICH (1991): Vorwort. In Hans-Dieter Schwind: Dunkelfeldforschung in Bochum. 1986–87. Wiesbaden. 1-3.
- BUJDOSÓ, ZOLTÁN – GYÖRKI, MÓNICA (2011): A biztonság szerepe a turizmusfejlesztésben. In: ACTA CAROLUS ROBERTUS 1 : 2 pp. 45-55.
- CONNIDIS, INGRID ARNET (1982): Rethinking of Criminal Justice Research. A systems perspective. Toronto, Holt, Rinehart and Winston of Canada Limited
- CSATAI TAMÁS (2010): Becoming a Policeman and the Tendency of Requirements of Fitness during on Duty from the End of the 1800s to Today. In: Internal Affairs Review, Vol. 58. No. 7–8.



CSATAI TAMAS (2010): A rendőrré válás és szolgálatellátás alatti pályaalkalmassági követelmények alakulása az 1800-as évek végétől napjainkig. In: Belügyi Szemle, 58. évfolyam, 7-8. szám.

SKULI, DAVID (1995): A rendőri teljesítmény mérése. In: Új rendészeti tanulmányok. 1 szám

DÁNOS VALÉR (2002): Performance Evaluation. In: Internal Affairs Review, No. 4.

DANOS VALER (2002): A teljesítményértékelés. In: Belügyi Szemle 50. évfolyam 4. szám. 20-23.

DÉRI PÁL (2000): Criminal Statistics and Reality. BM publisher

DÉRI PÁL (2000): A bűnözési statisztika és a valóság. Budapest. BM kiadó

DÉRI PÁL (2008): The Problems of Criminal Statistics and the Prognostic of Criminality. Number 3 Preliminary Study for the Social Debate of Overall Law Enforcement Strategy. Budapest

DERI PÁL (2008): A bűnügyi statisztika problémái és a bűnözés prognózisa. 3. számú előtanulmány az átfogó rendészeti stratégia társadalmi vitájához. Budapest

DOMOKOS ANDREA (2013): Appearing the Idea of Criminology in Hungarian Penal Law at the End of the 19th Century. In: Deres Petronella – Domokos Andrea (eds.): De iuris peritorium meritis 8. 80 Studia in Honorem Tamács Jakucs. Budapest, Károli Gáspár Protestant University Faculty of State and Law

DOMOKOS ANDREA (2013): A kriminológiai gondolat megjelenése a magyar büntetőjogban a XIX. század végén. In: Deres Petronella – Domokos Andrea (szerk.): De iuris peritorium meritis 8. 80 Studia in Honorem Tamács Jakucs. Budapest, Károli Gáspár Református Egyetem Állam- és Jogtudományi Kar, Budapest

DORMÁN TIVADAR (2002): Evaluation System with a New Aspect. In: Internal Affairs Review, No. 4. 15-23.

DORMAN TIVADAR (2002): Új szemléletű értékelési rendszer. In: Belügyi Szemle 50. évfolyam. 4. szám. 15-23.

FARKAS ÁKOS (2002): The cane Hung on the Wall, in Other Words the Burdens of the Efficiency of Penal Jurisdiction. Osiris, Budapest

FARKAS ÁKOS (2002): A falra akasztott nádpálca, avagy a büntető igazságszolgáltatás hatékonyságának korlátai. Osiris, Budapest

FINSZTER GÉZA (2006): Operation Models of Criminal Investigation. In: Gönczöl Katalin – Kerecsi Klára – Korinek László – Lévay Miklós (eds.): Criminology. Budapest, Complex Publisher

- FINSZTER GEZA (2006): A bűnüldözés működési modelljei. In: Gönczöl Katalin – Kerezi Klára – Korinek László – Lévay Miklós (szerk.) : Kriminológia – Szakkriminológia, Complex Kiadó, Budapest
- FINSZTER GÉZA (2008): Legal Bases of the Operation of Law Enforcement Bodies. Budapest, RTF, MA lecture notes
- FINSZTER GÉZA (2008): A rendészeti szervek működésének jogi alapjai, Budapest. RTF, MA jegyzet
- FINSZTER GÉZA (2010): Power-Enforcement Organization or an Authority Giving Safety. In: Criminology Studies, 47.
- FINSZTER GÉZA (2010): Erőszakszervezet vagy biztonságot szolgáltató hatóság. In: Kriminológiai tanulmányok 47., Budapest
- GYÖKÉR IRÉN (2007): Human Resource Management. Budapest
- GYÖKÉR IRÉN (2007): Emberi erőforrás menedzsment. Budapest
- HARCOURT, BERNARD (2001): Illusion of order: The Falsepromise of Broken Windows Policing. Cambridge, Mass: Harvard University Press, pp. 90-104.
- KÁDÁR JÁNOS (1967): A bűnügyi statisztika felhasználásáról a rendőri vezetésben. In: Rendőrségi Szemle 9. szám
- KERTÉSZ IMRE (2002): Statisztikai mozaik. In: Belügyi Szemle, 50. évf. 4. sz. 29–32.
- KISS NORBERT MIHÁLY (2011): Az ösztönzés módszerei és sajátosságai a rendvédelmi szerveknél. In: Magyar Rendészet 2. szám. 50-60.
- KOMÁROMI ISTVÁN – TEREMI ZOLTÁN (1996): Starting Steps on the Way of Measuring Police Success Evaluation. In: Internal Affairs Review, No. 1.
- KOMÁROMI ISTVAN – TEREMI ZOLTAN (1996): Kezdeti lépések a rendőri eredménymérés útján. In : Belügyi szemle 1. szám. pp. 63-71.
- KORINEK LÁSZLÓ (1998): The Reflection of Criminality. Latent Criminality, Description of Criminality, Fear of Criminality. In: Gönczöl Katalin – Korinek László – Lévai Miklós (eds.): Criminology Studies – Criminology – Criminology Control. University Library. Corvina Publisher.
- KORINEK LÁSZLÓ (1998): A bűnözés visszatükröződése. Látens bűnözés, bűnözésábrázolás, félelem a bűnözéstől. In: Gönczöl Katalin – Korinek László – Lévai Miklós (szerk.): Kriminológiai Ismeretek – Bűnözés – Bűnözéskontroll. Egyetemi Könyvtár. Corvina Kiadó, Budapest
- KORINEK LÁSZLÓ (2003): Tendencies. In: Internal Affairs Review. No. 1.
- KORINEK LÁSZLÓ (2003): Tendenciák. In: Belügyi Szemle 1. szám.

KOZÁRY ANDREA (2008): International Comparative Organization Studies. In: Textbook for Master Students of the Police Academy. Budapest, RTF. ([http://rtk.uni-nke.hu/downloads/tanszekek/tarstud/tema/nemz\\_osszh\\_modsztan.pdf](http://rtk.uni-nke.hu/downloads/tanszekek/tarstud/tema/nemz_osszh_modsztan.pdf) - 2014. 05. 05.)

KOZÁRY ANDREA (2008): Nemzetközi összehasonlító szervezettan. Budapest, RTF. Kézikönyv a Rendőrtiszti Főiskola Mester szak hallgatóinak. ([http://rtk.uni-nke.hu/downloads/tanszekek/tarstud/tema/nemz\\_osszh\\_modsztan.pdf](http://rtk.uni-nke.hu/downloads/tanszekek/tarstud/tema/nemz_osszh_modsztan.pdf) - letöltve: 2014.05.05)

KRÉMER FERENC (2003): The Nature of Police Power. Napvilág, Budapest

KRÉMER FERENC (2003): A rendőri hatalom természete. Napvilág, Budapest

KRÉMER FERENC – MOLNÁR KATALIN – SZAKÁCS GÁBOR – VALCSICSÁK IMRE (2010): The Transformation of the Culture of Law Enforcement Profession – Strategic Conception. In: Studies on Law Enforcement Strategy, Law Enforcement Review Special Issue. 269-306.

KRÉMER FERENC – MOLNÁR KATALIN – SZAKÁCS GÁBOR – VALCSICSÁK IMRE (2010): A rendészeti foglalkozási kultúra átalakulása – stratégiai koncepció. In: Tanulmányok a rendészeti stratégiáról, Rendészeti Szemle különszám, pp. 269-306.

MAGYAR NAGYLEXIKON (1999): Budapest

MORGAN, PATRIC J. (1995): Measuring Police Activity, Performance-Developing and Survey. In: New Law Enforcement Studies, No. 1.19-27.

MORGAN, PATRIC J. (1995): A rendőri tevékenység mérése, teljesítmény-fejlesztés és a felmérés. In : Új rendészeti tanulmányok 1. szám. pp. 19-27.

NÉMETH ZSOLT (2007): The Lack of Confidence at Hungarian Police – Reasons and Effects. Lecture on the 'Complaint Mechanisms in Connection with Police Procedures' conference Organized by the Hungarian Helsinki Committee.

NÉMETH ZSOLT (2007): Bizalomhiány a magyar rendőrségnél – okok és következmények. Előadás a Magyar Helsinki Bizottság által szervezett 'Panaszmechanizmusok a rendőri eljárásokkal kapcsolatban' c. konferencián ([http://helsinki.hu/wp-content/uploads/panaszeljaras\\_eloadas\\_NemethZs\\_20070405.pdf](http://helsinki.hu/wp-content/uploads/panaszeljaras_eloadas_NemethZs_20070405.pdf) - 2014.05.13.)

Nyíri Sándor (2003): The Relationship between Prosecution and Investigation Authority. In: Internal Affairs Review, No. 7–8.

NYIRI SANDOR (2003): Az ügyészség és a nyomozóhatóság kapcsolata. In: Belügyi Szemle 7-8.szám

Pedagógiai és pszichológiai ismeretek rendőri vezetőknek (2009): RTF MA szak. Budapest, Pedagógiai Tanszék és Laboratórium

SALGÓ LÁSZLÓ (2004): The Present, Future and Perspectives of the Hungarian Police. In: Criminology Publications, No. 61.

SALGÓ LÁSZLÓ (2004): A magyar rendőrség jelene, jövője, kilátásai. In: Kriminológiai Közlemények 61. szám, Magyar Kriminológiai Társaság, Budapest, pp. 41-51.

SÁROSI PÉTER (2008): 'Zero Tolerance', Dangerous Illusions about Keeping Order. In: Speaker, Vol. 13. No. 3. pp. 1-6.

SAROSI PÉTER (2008): „Zéró tolerancia” veszélyes illúziók a rend fenntartásáról. In: Beszélő, XIII. évfolyam 3. szám. pp. 1-6.

SKULI, DAVID (1995): Measuring the Performance of the Police. In: New Law Enforcement Studies, No. 1. pp. 138-146.

SKULI, DAVID (1995): A rendőri teljesítmény mérése. In : Új rendészeti tanulmányok. 1. szám. pp. 138-146.

SOMOGYI JÓZSEF – VASS LÁSZLÓ – MADÁCS IMRE (1979): Measuring the Situation of Criminality and the Efficiency of Criminal Investigation. In: Internal Affairs Review, Vol. 17.

SOMOGYI JÓZSEF – VASS LÁSZLÓ – MADÁCS IMRE (1979): A bűnözés helyzetének és a bűnüldözés hatékonyságának mérése. In: Belügyi Szemle. XVII. évfolyam. 21-30.

SZABÓ ANDRÁS (1985): Strategies of Crime Prevention. In: Internal Affairs Review, No. 6.

SZABÓ ANDRÁS (1985): Bűnmegelőzési stratégiák. In: Belügyi Szemle 6. szám

SZABÓ ANDRÁS (2002): Criminology Thinking in Informatic System Plans. In: Internal Affairs Review, No. 4.

SZABÓ ANDRÁS (2002): Kriminológiai gondolkodás az informatikai rendszertervekben. In: Belügyi szemle 4. szám, pp. 34-36.

SZABÓ LAJOS (2012): Mi a biztonság? Pécsi Határőr Tudományos Közlemények XIII. Pécs.

TAUBER ISTVÁN (1980): To the Question of Efficiency of Criminal Investigation Work. In: Internal Affairs Review, Vol. 17.

TAUBER ISTVÁN (1980): A bűnüldözési munka hatékonyságának kérdéséhez. In: Belügyi Szemle XVII. évfolyam, pp. 59-63.

TÓTH TIHAMÉR (1990): The Effects of Social Changes on the Police, Their Judgement among Subordinates. In: College Observer, Vol. 1. No. 2. 156-176.

TÓTH TIHAMÉR (1990): A társadalmi változások hatásai a rendőrségre, megítélésük a beosztotti állomány körében. In: Főiskolai Figyelő. I. évfolyam, pp. 156-176.

VAVRÓ ISTVÁN (1998): The Methods of Measuring Criminality, the Characteristics of Hungarian Criminality. In: Gönczöl Katalin – Korinek László – Lévai Miklós (eds.):

Criminology Studies – Criminology – Criminology Control. University Library. Corvina Publisher

VAVRO ISTVAN (1998): A bűnözés mérésének módszerei; a magyarországi kriminalitás jellemzői. In: Gönczöl Katalin – Kerezsi Klára – Korinek László – Lévay Miklós (szerk.) : Kriminológia – Szakkriminológia, Egyetemi Könyvtár. Corvina Kiadó

VAVRÓ ISTVÁN (2002): The Reality of Criminal Statistics and Criminality. In: Criminology Publications, No. 60.

VAVRO ISTVAN (2002): A kriminálstatisztika és a bűnözés valósága. In: Kriminológiai Közlemények. 60.szám

WOLFGANG, MARVIN E. – FIGLIO, ROBERT M. – TRACY, PAUL E. – SINGER, SIMON I. (1985): National Survey of Crime Severity. Washington D. C.

ZIEGLER, JÖRG (1995): German Police and Federalism. In: New Law Enforcement Studies, No. 1.

ZIEGLER, JÖRG (1995): A német rendőrség és a föderalizmus. In: Új rendészeti tanulmányok. 1. szám. pp. 155-162.

The Ombudsman's Report about the Situation of Human Rights of Policemen: OBH 5007/1997.

Ombudsmani jelentés a hivatásos állományú tagok emberi jogi helyzetéről: OBH 5007/1997.

18/2012. (X. 12.) ORFK utasítás a megyei (fővárosi) rendőr-főkapitányságok, a rendőrkapitányságok és a határrendészeti kirendeltségek objektív mérőrendszer alapján történő értékelésének eljárásáról

<http://prezi.com/t-pqeagzd1pn/ismeretlen-tetteses-felderitesi-mutato-es-szervezeti-teljesitmenyertekeles/> alapján (2014. 05. 10.)