Abstract

Background and Study Aim: The most general mission of the police force in a democratic country is to provide its citizens with real safety and security. This mission can be fulfilled by the representatives of a given society recruited from among brave people. The aim of the study is to resolve the following issue: Has the level of bravery of police officers changed over the period of the twelve years of transformations of the Polish police force (1998–2010)?

Material/Methods: The authors of the article studied 124 police officers in 2010 and the results were then compared to the 126 police officers studied in 1998 with the same tool (the KK’98 questionnaire). The verbal simulation method employed enables one to estimate bravery in an indirect way. The bravery criterion applied was the declared way of action in the situations in which there was a threat of physical aggression.

Results: The police officers studied in 2010 do not differ from those studied in 1998 as regards the level of bravery. However, the result of the study obtained in 2010 is an indication of negative tendencies. Police officers are more inclined to resort to violence (instead of counteracting it in the way typical of brave people) in the case of a physical assault on a person whose relations with the respondent (i.e. a police officer) and the degree of violence of the assault have not been determined.

Conclusions: Over the twelve years between the studies there has not been any radical change in the system of recruiting candidates for the police or the methods and means used at all the stages of police training. The KK’98 questionnaire employed can be an effective selection tool as well as a criterion for reviewing the training effects in the police and other on-demand and uniformed public services.

Key words: aggression • aggressiveness • bravery • valour • on-demand and uniformed public services • on-demand public services

Author’s address: Ryszard Kałużny, University of Lower Silesia, Wagonowa 9 St., 53-609 Wrocław, Poland; e-mail: ryszard_kaluzny@op.pl

BACKGROUND

The word “bravery” is not an expression that is often used in the language of contemporary politics, journalism, sport, education or in other areas of theory and practice. In numerous fields it is being superseded by such terms as “aggression” and “aggressiveness”, which are given a positive meaning [1]. Frequently aggression is equated with effectiveness and craftiness in one’s behaviour. It is commercial visual media that outdo one another in the uncritical presentation of aggression, while access to these media and their power of influence, especially on a young audience, result in the deepening crisis of fundamental values and the pathological forms of violence at school, in one’s family and in the street [2–4].

Bravery, on the other hand, since time immemorial, has been regarded as one of ideals in a person’s life. It was believed, however, that the characteristics of bravery were conferred upon the people chosen by God. It was God that would make some people braver and more valorous than others [5]. In a number of societies bravery was
**Aggression** (in psychology) – is deliberate behaviour by the perpetrator intended to either hurt the opponent, harm or distress him/her in any other way, cause pain (regardless of whether this aim is achieved), or destroy things [26,27].

**Aggression** (in praxeology) – is to initiate destructive fight or move in a verbal dispute from material arguments to those causing distress to the opponent [28].

**Aggressiveness** – a human characteristic manifesting itself in inclinations to hurt others, to destructive behaviour: *Aggressive = virulent, truculent, attacking* [28].

**On-demand and uniformed public services** – in Poland they consist of professional formations (police, armed forces, border guard, fire service). The characteristic features of these groups are as follows: orders, uniforms, being placed in barracks, restrictions on private and family life, a possibility to receive special perks from the state [29].

**On-demand public services** – these are social groups in which availability consists in the assumed type of social relationships. They include subordinating some participants of social life to others. The people in charge do not only give orders to those under them, but also they are in a position to enforce these orders or obedience [29].

Associated with the conduct of people coming to other people’s aid, effectively opposing individual and collective base behaviour, particularly aggression and violence [6–14]. In such an interpretation brave is a person who is upright, responsible, kind towards others and efficient in his/her actions. According to Tadeusz Kotarbiński [8], “bravery” means efficiency in good deeds, efficiency combined with estimable aspirations. This definition comes close to general feelings. What is a measure of bravery for numerous people is offering effective help not only to one’s neighbours endangered by elements and threatened in every other way, especially by villains.

In certain cultural circles bravery is related to countering aggression, while at the same time respecting ethical norms, i.e. the rules of noble fight. Hence valour is regarded as a special form of bravery (bravery in a direct fight). In practice, however, the terms “bravery” and “valour” are often used interchangeably. This is not fully justified, the reason being that a valorous person is at the same time a brave person, whereas not every brave person must be valorous [1]. An analysis of human activity over the centuries leads to the conclusion that the models of valour were developed, first and foremost, in defensive fights [8].

Bravery (valour), as a theoretical category, translates directly into the practical sphere. It can justifiably be equated to the rudimentary paradigm of contemporary holistic education [1]. To act efficiently and honestly needs a multitude of coherent characteristics, both the inanimate as well as the acquired ones in the process of the widely-understood educational influence of various environments. However, the systems of the periodic appraisal of the competence of officers in on-demand and uniformed public services do not incorporate the bravery criterion. The major measures of competence include knowledge, physical fitness and certain specialist skills [13,16]. This is not surprising, as the accurate and reliable assessment of bravery is a difficult methodological issue for at least three reasons:

- it is necessary to combine the assessment of efficiency (effective – ineffective) with the ethical one (commendable – disgraceful);
- the assessment process must include the way of acting in difficult and extreme situations when one’s life and health is at risk as a result of external conditions (disasters, cataclysms, accidents, physical aggression);
- a multitude of potential situations, the solution of which requires taking measures in compliance with the paradigm of bravery, makes it difficult to select the most representative methods to accurately diagnose this characteristic [17].

In this article, as a frame of reference to diagnose the bravery of police officers, the authors have assumed only actions in the situations in which there is a threat of physical aggression (in fact the authors assess valour). There are two underlying assumptions. First, among the numerous threats to the daily service of police officers that they should effectively stand up to is aggression: towards anybody or directly them. Second, to determine bravery in a direct manner and conforming to the principles of science (to ensure the repeatability of measurement under the same conditions) is impossible in practice. This is because it is difficult to create identical threat situations, particularly physical aggression for each of the people studied and measure their bravery (valour).

As the criterion for assessing bravery the authors then assume the result of simulation tests (the verbal simulation method). Simulation methods, which are stressed by Wasylik [18], imitate reality representing it in a simplified fashion. The decision concerning the research of Polish police officers is connected, first and foremost, with the cognitive layer. The most general mission of the police force in a democratic country is to provide its citizens with real safety and security. This mission can be fulfilled by the representatives of a given society recruited from among brave people. It is common knowledge that in the period prior to the transformational changes in Poland (before 1990), recruitment to the police force was based on political criteria: obedience to the communist government. The police officers who had been positively assessed were able to continue their service for several years. There are no grounds, however, to claim that the positive assessment was determined by the bravery criterion.

The major aim of the research is to answer the following question: Has the level of bravery of police officers changed over the period of the twelve years of transformations of the Polish police force (1998–2010)?

**Material and Methods**

The authors studied 124 police officers in 2010 (including nine females) from the northern and western regions of Poland. The results of the research are compared with the research of 126 police officers (including 16 females) from the different regions of Poland, which was conducted in 1998 [1]. The characteristics of both groups are similar: 2010 (average age: 35, the oldest: 58, the youngest: 24; average work experience: 11.8 years, the longest: 30 years, the shortest: 1 year). While researching especially officers in on-demand and uniformed public services the rudimentary difficulty of methodological nature lies in the selection of a representative sample. Although in both studies this criterion is not satisfied, a random selection of police officers entitles one to claim that the distribution of factors influencing the level of bravery is so similar that the
comparative study is legitimate. First and foremost, police officers represent a similar cross-section of posts, participated in periodic training courses and examinations proving their professional qualifications and were subject to similar influences from other environmental factors (threats, stress, availability, etc.).

The results of females were not isolated in the analysis, for the simple reason that they constituted a small proportion; in addition to this, the criteria of professional requirements for men and women holding equivalent posts are identical.

In both studies an identical verbal simulation was used and the tool was the KK’98 questionnaire with verified accuracy and reliability. The validation procedure for the questionnaire was performed while developing its initial version, i.e. a tool for the assessment of defensive dispositions [19, pp. 62–63]. A modification consisted in the reduction of statements from 17 to 12, making some of them more specific and correcting the point scale [17].

Six randomly distributed questions (statements) referred to the description of the situation in which every person has been or may be. Another six statements depicted situations concerning different vital issues. Each situation had five alternative answers attributed, from which respondents could choose only one. The basis for the choices made was the assumption that a respondent was driven by the following: former experience, knowledge and skills, responsibility for the fate of others, courage or no courage, a sense of confidence, awareness of risk and consequences faced, etc. Four out of twelve questions (statements) served to determine the respondent’s potential behaviour in various situations in which there was a threat of physical aggression. The declared behaviour of the person under research are subject to a general assessment in two categories: passive – active. In the category of the active conduct there are two ways of acting which are jointly attributed efficiency and ethical assessments: reprehensible behaviour (not very efficient and more or less disgraceful); desirable behaviour (efficient and more or less commendable). The arrangement of alternative answers is then built upon the following principle: only one of the answers informs about passivity (0 points); the other four answers inform about active counteraction, which, in addition, are subject to grading as regards the quality of efficiency and ethical assessments (from 1 to 4 points). Two of the answers reveal reprehensible behaviour (one and two points), whereas two indicate desirable behaviour (3 and 4 points). An estimated list of potential threats of physical aggression and the arrangement of the answers (declarations) assessed is included in Table 1 (the key is the intellectual property of the authors of the modification [17]). The descriptions in Table 1 inform one that a score of 0 points indicates behaviour belonging to extremely

### Table 1. The statements of the KK’98 questionnaire used to diagnose a person in the potential situations of physical aggression threat [1].

<table>
<thead>
<tr>
<th>Potential situation of physical aggression threat</th>
<th>Description of situation in questionnaire</th>
<th>Arrangement of extreme answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. A physical assault on a person whose relations with the respondent and the fierceness of the assault have not been determined.</td>
<td>If in your presence another person were physically assaulted,</td>
<td>Passive behaviour (0 points)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contradiction of bravery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I would not defend him/her.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I would always try to vigorously defend him/her, observing the rules of noble fight.”</td>
</tr>
<tr>
<td>B. A physical assault on the respondent without specifying the fierceness of the assault.</td>
<td>If you were physically assaulted,</td>
<td>Passive behaviour (0 points)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contradiction of bravery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I would try to escape, and if it were impossible, I would not counteract it actively.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“First I would try to restrict his/her movement, and if it were impossible, I would use severe forms of physical constraint.”</td>
</tr>
<tr>
<td>C. A physical assault on close friends and family with intent to take their life.</td>
<td>If you were absolutely certain that the aim of someone else’s physical aggression on a person close to you is to take their life,</td>
<td>Passive behaviour (0 points)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contradiction of bravery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I would not take the risk of defensive action.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I would certainly defend them following this rule: first restrict movement of the assailant, and if it failed, I would try to destroy his/her tools of combat, mutilate him/her; kill him/her, but only as a last resort.”</td>
</tr>
<tr>
<td>D. A physical assault on the respondent with intent to take his/her life.</td>
<td>If you were firmly convinced that the aim of someone else’s physical aggression is to take your life,</td>
<td>Passive behaviour (0 points)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contradiction of bravery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I would ask him/her to abandon this act not taking other action.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I am totally convinced that I am capable of defending myself, first of all by restricting movement of the assailant, and if it turns out to be ineffective, first by destroying his/her tools of combat, next mutilating him/her, and as a last resort by taking his/her life, yet without any anger.”</td>
</tr>
</tbody>
</table>
meaning cowardice and aggressiveness (to violence) (degrees of bravery levels [1]: very high (methods were also used, the authors used the unified indices of bravery levels [1]: very high (94–100 pp); high (81–93 pp); average (62–80 pp); low; i.e. an inclination to violence (51–61 pp); insufficient, i.e. high aggressiveness (26–50 pp); extremely insufficient, i.e. a combination of cowardice and aggressiveness (0–25 pp), with a score of 0 meaning extreme cowardice and 25 extreme aggressiveness.

The criteria of unification are based on the basic assumption that a raw score is included in a specified continuum, the boundaries of which are defined by the values 0 and 1 (or 0 and 100 percentage points). A unified assessment of bravery is then expressed by the proportion of a raw score related to the maximum value of the continuum. In the case of the KK’98 questionnaire, a raw score of 16 corresponds to the value 1 (or 100 percentage points). For instance, a raw score of 12 corresponds to the value 0.75 or 75 percentage points (Index pp) [1].

To facilitate the comparative study, the authors use a unified index (Index pp) also in the analysis of individual diagnostic statements (from A to D) – the boundaries of the continuum are 0 and 4 points.

In the analysis of empirical data the authors used mean, range, standard deviation and the indices of the significance of differences between two means for independent samples and correlated samples.

**Results**

Nominally, a slightly higher bravery level was demonstrated by the police officers studied in 1998 than the ones studied in 2010 (Table 2). In addition, the police officers studied in 1998 showed fewer individual differences (±2.52) than the ones studied in 2010 (±2.83). This trend is also corroborated by the range of the KK’98 questionnaire points (with possible extreme scores of 0÷16 points): 1998 (5÷15), 2010 (3÷15).

### Table 2. A general bravery level of police officers estimated with the assessment of the declared actions during the four simulated physical aggression threats.

<table>
<thead>
<tr>
<th>Year of study (size of sample)</th>
<th>Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw score ± range</td>
</tr>
<tr>
<td>1998 (n=126)</td>
<td>10.47 ±2.52 5±15</td>
</tr>
<tr>
<td>2010 (n=124)</td>
<td>10.04 ±2.83 3±15</td>
</tr>
<tr>
<td>Differences</td>
<td>0.43 ±0.31 2÷0</td>
</tr>
</tbody>
</table>

Differences statistically significant: (1998) A-B, A-D p<0.001; A-C p<0.01; (2010) A-D p<0.001; A-B p<0.01; A-C p<0.05.

### Table 3. The bravery level of police officers estimated with the assessment of the declared behaviour in each of the four simulated situations of physical aggression threat.

<table>
<thead>
<tr>
<th>Simulated threat situations</th>
<th>Year of study (size of sample) and indices</th>
<th>Differences between periods of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. A physical assault on a person whose relations with the respondent and the fierceness of the assault have not been determined.</td>
<td>1998 (n=126) 2.25 ±0.85 0÷4 (56.25 pp)</td>
<td>2010 (n=124) 2.19 ±0.90 0÷4 (54.75 pp)</td>
</tr>
<tr>
<td>B. A physical assault on the respondent without specifying the fierceness of the assault</td>
<td>1998 (n=126) 2.75 ±1.00 1÷4 (68.75 pp)</td>
<td>2010 (n=124) 2.55 ±1.11 0÷4 (63.75 pp)</td>
</tr>
<tr>
<td>C. A physical assault on close friends and family with intent to take their life</td>
<td>1998 (n=126) 2.71 ±1.32 0÷4 (67.75 pp)</td>
<td>2010 (n=124) 2.46 ±1.13 0÷4 (61.5 pp)</td>
</tr>
<tr>
<td>D. A physical assault on the respondent with intent to take his/her life</td>
<td>1998 (n=126) 2.77 ±1.25 0÷4 (69.25 pp)</td>
<td>2010 (n=124) 2.84 ±1.35 0÷4 (71 pp)</td>
</tr>
</tbody>
</table>

Differences statistically significant: (1998) A-B, A-D p<0.001; A-C p<0.01; (2010) A-D p<0.001; A-B p<0.01; A-C p<0.05.
However, the result obtained in 2010 reflects clear negative trends. The arithmetic mean of the unified bravery index (Index pp) is almost a reproduction of the lower boundary of the average level. This implies that approximately half of the police officers are either prone to violence or demonstrate high aggressiveness. The lowest score (18.75 pp) is empirical proof that at least one of those police officers in certain situations in which there is a threat of physical aggression may turn out to be a coward, more often he/she may even show extreme aggressiveness.

A detailed analysis of the behaviour declared in the four simulated physical aggression threats highlights this trend even more (Table 3). Among the police officers studied in 2010 were both cowards as well as very brave officers (this is proven by the range of raw score). The police officers studied in 1998 at least in situation B (a physical assault on the respondent, i.e. the police officer studied) did not turn out to be extreme cowards.

An inclination to violence would dominate among the police officers studied in 1998 when the simulated situation A concerned a physical assault on a person whose relations with the respondent (i.e. a police officer) and the fierceness of the assault have not been determined. This inclination further deepened among the police officers studied in 2010. Furthermore, an inclination to respond with violence (and not to undertake defence in the way proving one’s bravery) emerged in situation C, i.e. a simulated physical assault on the people close to the respondent when the aim of the assailant was to take the victim’s life.

**Discussion**

Over the twelve years between the studies there has not been any radical change in the system of recruiting and training the Polish police. Such a situation probably concerns the majority of the countries from the former Eastern bloc. This claim is, however, based exclusively on the research of security guards from Lithuania in the years of 2004–2005 [1,15]. The security guards demonstrated a similar bravery level (as regards the mean result and individual differences) to the Polish police officers studied in 1998 [1]. Most of them had been recruited from among former soldiers and police officers. True, the Index pp of the security guards who would practise martial arts was higher than others, but the differences were not statistically significant. Both groups included security guards of high aggressiveness. Hence, it is more likely to be true that in numerous situations requiring that they actively counteract aggression, they cannot defend other people or themselves, like the Polish police officers, in the way typical of brave (valorous) people.

The result similar to the police officers studied in 2010 was observed by Kalina et al. [1] while researching cadets at one of the Polish military academies five years before. It can be expected that selection and training methods are similar in the Polish military and the police. The reliability of the result of the cadets is as significant as they were studied both with the KK’98 questionnaire and the KS-4M projective test [1], but in both cases the Index pp was almost identical. Respectively: 62.13 pp and 63.18 pp [1]. The security guards were also studied with both of these tools (KK’98 = 70.93 pp and KS-4M = 63.84 pp), but the difference of the scores was statistically significant (p<0.05).

Unfortunately, the results of research with those simulation methods and tools so far have only been published in the publications addressed to the audience at national level (in Poland, Lithuania, the Czech Republic). Some of the papers published in nationwide and international post-conference materials still would not reach wider audiences. Those publications, however, succeeded in accomplishing their mission to a large extent. The period of the political transformation in Poland after 1989, on the one hand, forced the necessity to modernise all of the on-demand and uniformed public services. The aforementioned publications did activate the most creative scientists and teachers professionally connected with these services. However, radical redefinitions at key decision-making levels did not take place. For a long time old rules were kept in place, although the most modern scientific knowledge about the phenomenon that is the subject of this paper was available. The selection rules were not modified, neither were training methods, the criteria for diagnosing psychomotor competence correlated with the uniqueness of a particular on-demand and uniformed public services or on-demand public service (especially rescue services). This, among other things, may help to explain the result of the studies presented in this paper.

In Poland the leading role in developing the most modern methodology for evaluating the factors that determine the accurate selection of candidates for individual on-demand public services and on-demand and uniformed public services and the assessment of their professional qualifications has been played by the Polish Scientific Physical Education Association Military Section [20]. In the years from 1996 to 2008 the Association published 12 monographs, most of which served as teaching material at training centres of the police, the prison service, the border guard, etc. Four PhD theses were written, which offered an empirical basis for publishing academic textbooks on human behaviour in threat situations [17] and the methods of assessing psychomotor competence in emergencies [16].
The issue depicted in the previous paragraph has a much wider dimension. It pertains to the evaluation of scientific achievements not only from the perspective of their cognitive and application value, but also of the utilitarian one in a global society. Quality knowledge, namely having all the qualities mentioned above, not documented with the Impact Factor, does not lose its significance as regards its subject matter. On the whole, it proves that it is not widely available (although it is even published in any of the conference languages). Hence a sensible conclusion is that this quality knowledge is not published in a global journal, so it does not appear in widely available literature databases or that it is published in monographs and textbooks addressed to a local audience. This issue, also in other contexts, is accurately justified by Barczyński et al. [21]. Since one of the most significant global problems is countering terrorism, a good example of global access to quality knowledge (i.e. also having high utilitarian significance) is the work of Ashkinazi et al. [22] published in the Archives of Budo, i.e. a global science journal with the Impact Factor. The point of this argumentation is proven by the downloads statistics for this article (more than 2300 since 2005).

A good elaboration of this issue, in the authors’ opinion, in the context of the problem that is the subject of research of this article is the discussion that was held during a CISM International Symposium (in Guangzhou, China 11–17 November 2001) after the presentation of the work Different Ways of Counteracting Against Aggression by Soldier and Other Social Groups [23]. The results of that presentation had been based on the data obtained with the KK’98 questionnaire. A scientist from Canada concluded that if they had had that knowledge earlier, they would certainly not have needed half a year to select soldiers and police officers for a Peace Keeping Mission contingent. No surprise. The issue of selecting brave people for, first of all, the on-demand and uniformed public services has a global dimension and is a very complex task today. There are numerous reports on cases of ignominious behaviour of soldiers (from various countries) carrying out missions in Iraq, Afghanistan or other parts of the world. Reports that compromise intervening police officers in a number of countries all of the world appear on a daily basis in the media, especially the electronic ones. The results presented in this article reveal much greater potential for the application of simulation methods, not only in the studies on bravery (valour). In the case of the studies of police officers and other bodies undertaking programme intervention, which in a number of cases is monitored and documented with video footage as required by law, it is possible to compare the data from laboratory observations with the results of repeated direct observations (which is made possible by video footage). The intervention phenomenon is quite well-quantified by contemporary science [24,25] and psychomotor competence in this respect is accurately and reliably evaluated [15,16]. The prospect of enhancing the technological capabilities of monitoring actual interventions offers an opportunity to review the accuracy of the simulation tests used. In consequence, reliable tools of selecting candidates for individual on-demand public services as well as selection tools for the specified type of interventions will be created. Such a prospect also translates into specific economic effects.

**CONCLUSIONS**

Over the twelve years between the two studies, i.e. in the significant and long period of the political transformation of the Polish society, there has not been any radical change in the system of recruiting candidates for the police or the methods and means used at all the stages of police training. On the contrary, trends are negative. Although the aim of the research was not another verification of the accuracy of the KK’98 questionnaire, the comparative study of the results of the research entitles one to formulate a conclusion that the questionnaire can be an effective tool for both selecting and reviewing the training effects in the police and other on-demand and uniformed public services.

**Acknowledgment**

The study was conducted within the research project URWWF/S/01: “The Methods of Diagnosing and Preparing a Human Being for Acting in Difficult and Extreme Situations” (Resolution No. 05/12/2010 Bioethics Committee at the University of Rzeszow, Poland).

**REFERENCES:**


252 | 2011 | ISSUE 4 | VOLUME 7
25. Klukowski K, Raczyński H, Mazurek K: Psychophysical and health conditions of the capacity to do the service by officials of defence formations [In:] Kalina RM, Kaczmarek A (red.) Ukierunkowane przygotowanie obronne. PTNKE tom 3; 1997: 10-16 [in Polish, abstract in English]