

The level of bravery and aggressiveness of the sports activity organisers for the youth – simulation research

Authors' Contribution:

- A Study Design
- B Data Collection
- C Statistical Analysis
- D Manuscript Preparation
- E Funds Collection

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Abstract

Background & Study Aim:

The main category of theoretical and empirical agonology is a struggle and all its variations. When aggression is directed at the man directly from a short distance, in order to survive should take self-defence. This way are doing the bravery man not necessarily adequately prepared. If the attack at the micro scale is not addressed directly in the individual, so the circumstances are a factor, which generally modify the behaviour of both those not fully conscious (which are beyond the reasonable control) and specific decisions and actions. The aim of this study is the projection of human behaviour in similar situations of interpersonal aggression at the micro scale when the modifying factor is the intervention of a police officer, for which the reason is not defined.

Material & Methods:

In anonymous simulation tests 516 adults the sports activity organisers for the youth (110 females- F and 406 males- M) applied the KS-4M projective test. Picture 1 shows the behaviour of nine people in an extremely acute conflict situation (3 in a manner providing for bravery, 3 for aggressiveness). Picture 4 shows the behaviour of the seven people in a similar situation, where one of the characters is a policeman intervened with force (1 behaviour is attesting for bravery, 3 for aggressiveness). In both pictures one simulations prove about: total helplessness; being indifferent to physical harming others; fascinating to physical violence and aggression.

Results:

Projection of actions (behaviours) in both cases among women as well as men slightly is correlating positively ($r = 0.114; 0.171$) is not statistically significant. Change in circumstances when the policeman intervenes, causing the migration of the declared actions (behaviours) towards aggressive one. In a situation on picture 1 declarations prove: bravery 95% F, 90% M; aggressiveness 2% F, 3% M and in situation on picture 4, respectively: bravery 69% F, 68% M; aggressiveness 20% F, 21% M.

Conclusion:

Aggressiveness is not stable feature and does not distinguish females and males of a similar age, with similar professional qualifications and professional-social activity. For revealing aggressiveness or suppression (more or less conscious controlling) significant influence have circumstances of the situation of acute interpersonal conflict.

Key words:

aggression • agonology • defence struggle • martial arts bibliotherapy • projective test

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Bravery – means efficiency in good deeds, efficiency combined with estimable aspirations [36].

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 [37, 38].

Aggression (in praxeology) – is to initiate destructive fight or move in a verbal dispute from material arguments to those causing distress to the opponent [36].

Aggressiveness – a human characteristic manifesting itself in inclinations to hurt others, to destructive behaviour. *Aggressive* = virulent, truculent, attacking [36].

Negative cooperation – struggle characterized by non-compliance purposes (rivalry) [36].

Positive cooperation – interaction for compliance purposes [36].

Praxeology (praxiology) – science about good work. *A Treatise on Good Work*, a fundamental lecture of praxiology by T. Kotarbinski (the first edition in 1955) has been translated into majority of the so-called congress languages (English, German, Russian) and as well: Czech, Japanese, and Serbo-Croatian.

Simulation – caused in model an event, which under some circumstances is similar to the event occurring in examined real object [36].

INTRODUCTION

Nowadays, the standard is to monitor airports, railway stations, banks, supermarkets, market-places, streets, etc. Thus, entities responsible for public safety have at their disposal documented observations of violence and physical aggression directed towards individuals or even large groups of people (e.g. terrorist attacks in Nice on 14 July 2016, a 19 tonne cargo truck and on 19 December 2016 in Berlin). The results obtained in the course of analyses of such events form the basis for modifying the system of prevention and direct defence.

The essence of prevention which reaches the furthest comes to preventing such events from happening. On the foreground, there comes a need to identify persons exhibiting increased aggressiveness already at the stage of early childhood education, provided that the education is focused on continual development of personality. The primary criteria of developed personality include: empathy, proper and responsible interpersonal relations, which are free of any discrimination, etc.

The practice, however, offers us numerous evidence that at first most determined aggressors are able to effectively hide their destructive needs even from their closest ones; secondly, it is difficult to observe interest and necessary determination among the most crucial coordinators of social life to generally educate the Society of Knowledge, supposedly emerging before our eyes, to non-aggression. On the contrary, promotion of neogradiatorship as sport in a global social space [1, 2] is perhaps the most tangible proof that permanent education to aggression is a tangible form of justifying domination of the stronger over the weaker in any other dimension of social activity, under the guise of *fair play*. Unfortunately, with such defective public awareness scientific discoveries do not translate into implementations, although they *a priori* fall within the concept of continual development of an individual and establishment of the Society of Knowledge. These are the primary premises of our reasoning.

From the perspective of the expected and effective prevention, a methodological difficulty lies in the fact that there are limited possibilities of studying aggressiveness with the use of direct methods. Simulation methods, which have in a sense of double degree, deserve to be called optimal. The prerequisite for understanding these

methods is to correctly use terms “aggression” and “aggressiveness”.

Aggression is a destructive action, whereas aggressiveness is a personal (mental) trait of aggression. For the sake of simplicity, we leave aside cases in which aggressiveness stems from neurophysiological pathologies. However, regardless of the grounds for aggressive actions, these actions may be observed in a direct manner – if we participate in or witness such event (participating observation). Monitoring systems allow us for “direct, secondary and numerous observation” of each registered event. Such function is served by a “black box” during studies of the reasons for air clashes but in relation to the sound recording.

Thus, as far as canons of methodology used in empirical studies are concerned it is obvious that on the basis of phenomena directly observed (aggressive actions and acts of violence which are interesting for us in this article), we will be able to easily identify a perpetrator of interpersonal physical aggression and its main indicators (hits in a specific body part or an intent to hit, if a person attacked makes a dodge; tugging on clothes, tying the victim’s body or e.g. hands, etc.). We will also be able to determine an entity towards which aggression is directed effectively or ineffectively (effectiveness graduated, so some intermediate degree). Interpersonal physical aggression belongs to a category of phenomena which do not fall within criteria for scientific indirect observation which is repeatable in laboratory conditions primarily for ethical reasons. Instead, we can use two types of simulations: projection tests (verbal, written, computer-mediated, pictorial one [3-5]) or motor tests (staging, decision games, fun forms of martial arts [6-10]). The results obtained during direct observation of such simulations can be classified as the “first degree” of “double-degree simulation” referred to above. These phenomena observed directly are the indicators of the so-called interfered phenomenon – aggressiveness. Interfered phenomena are those about which we learn by reasoning [11].

If the goal is to identify an aggressor, we will identify a “hit”, “tugging on clothes”, “tying the victim’s body” as **elementary terms** in accordance to methodology of empirical studies, whereas while identifying aggressiveness, these will be **theoretical terms**. The sense of elementary terms is obvious as they pertain to

phenomena which can be perceived sensually. Interfered phenomena cannot be observed in such a way, therefore operational definitions are necessary. Thus, in the simplest terms: the more aggressive acts in a simulated situation (or documented by means of e.g. monitoring) the studies person reveals, the greater the likelihood that their agonistic potential [12, 13] is for some reasons determined by aggressiveness.

If bravery is an opposite to aggressiveness [14], properly prepared simulations of threat of physical aggression cannot lack elementary terms (e.g. verbal counteraction”, “sacrificial defence”, “complete helplessness in the event of personal threat”, “responding with aggression to aggression”) which are indicative of more or less effective counteraction while respecting the criteria of necessary (self-)defence, going beyond the rules or abandon defence, etc. Adequate simulation tests used in *agonology* provide theoretical terms which allow us to identify three categories of events – **aggressiveness, bravery, inaction**.

Agonology (science about struggle) studies all types of negative cooperation, including defence struggle and self-defence [13, 15]. When aggression is directed at the man directly from a short distance, such person should defend oneself in order to survive. A brave man is not necessarily prepared to act in such manner. If the attack is not aimed directly at an individual at the micro scale, the circumstances become a factor, which generally modifies the behaviour both of those who are not fully conscious (who are beyond the reasonable control) and those who take specific decisions and actions.

The aim of this study is the projection of human behaviour in similar situations of interpersonal aggression at the micro scale when the modifying factor is the intervention of a police officer, for which the reason is not defined.

MATERIAL AND METHODS

In anonymous simulation tests 516 adults the animators of youth sports (110 females- F and 406 males- M) applied the KS-4M projective test [16]. The test is based on four presumptions: 1. Under certain conditions, internal or external, a human being becomes violent or extremely aggressive physically, irrespectively of the level of activities; 2. Upon being attacked,

one counterattacks trespassing the level of necessary defence, defends him-/herself but observing the rules of a just struggle, or exhibits helplessness or submission; 3. When others are being attacked, one may behave like mentioned in Point 2, may counteract verbally, may display total indifference or an extreme fascination; 4. In response to visual stimuli (pictures presenting the abovementioned behaviours in a micro- or macro scale), the subject indicates that particular character or projection of solving given situation, that is closest to own disposition of a particular functioning.

Picture 1 shows the behaviour of nine people in an extremely acute conflict situation (3 in a manner providing for bravery, 3 for aggressiveness). Picture 4 shows the behaviour of the seven people in a similar situation, where one of the characters is a policeman intervened with force (1 behaviour is attesting for bravery, 3 for aggressiveness). In both pictures one simulations prove about: total helplessness; being indifferent to physical harming others; fascinating to physical violence and aggression.

RESULTS

In the first simulated situation, both women (94.5%) and men (90.3%) indicate active counteraction against physical aggression. However women limit themselves to verbal counteractions. Most of them (73.4%) are willing to call for cessation of aggression, whereas 21.8% of them call for police assistance (Figure 1). Among men, the proportions are comparable (71% and nearly 16%, respectively), however 4% of them declare sacrificial defence of a person attacked (Figure 2). Distribution of other actions among women is as follows: 1.8% declared being indifferent to physical harm of others; 1.8% is fascinated with violence and aggression; 0.9% answers with aggression to aggression; 0.9% shows extremely severe physical aggression. Among men: 4.5% is fascinated with violence and aggression; 1.7% declared being indifferent to physical harm of others; 1.7% answers with aggression to aggression; 1.5% shows extremely severe physical aggression; 0.25% (one man) declared complete helplessness in the event of personal threat. The results of the first simulation indicate that 5.5% of women (Figure 1) and 9.4% of men (Figure 2) show aggressiveness in such situation.

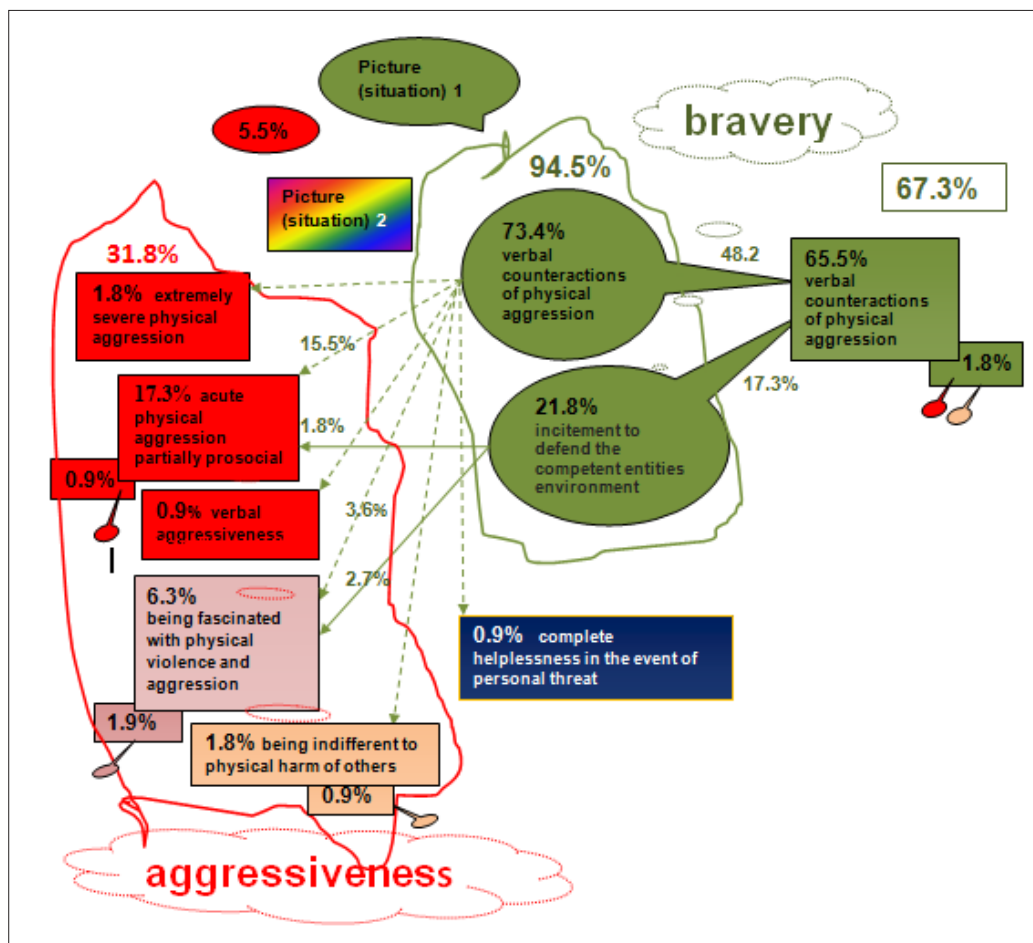


Figure 1. Migration declared actions by the sports activity organizers for the youth (110 women) in simulated situations of physical aggression in the micro scale (results: Picture 1 ovals; Picture 2 rectangles).

Although the fourth simulated situation is still dominated by defensive actions (women 67.3%, a decrease by 27.2%; men 67.7%, a decrease by 22.6%), however there is a pronounced trend towards actions which indicate activation of aggressiveness and only slight (1.8-3.2%) change from aggressiveness to bravery (Figures 1, 2). The results of the second simulation (Picture 4 KS-4M) show that 31.8% of women and 31.4% of men show aggressiveness in such situation. A switch of actions towards physical aggression partially prosocial is the most abundant among men who are determined to sacrificially defend themselves against severe physical aggression in the first situation (1.2% of all persons surveyed, whereas 31%, i.e. 5 out of 16, are prepared for sacrificial defence in the first situation) (Figure 2). These men relate themselves to an intervening policeman in the fourth situation.

Among five pairs of simulated actions quantified with the same number of diagnostic points (Picture 1 and 4, respectively), calling for cessation of aggression was most stable – in relation to all persons surveyed: men 51.7%, women 48.2%. When proportion (as a measure of this stability) is calculated from the number of people who are willing to call for the cessation of violence in a simulated situation presented on Picture 1, the result is even more pronounced in the case of men (72.9% stability) than women (62.25%). On the basis of the second criterion, among 18 men who are fascinated with physical violence and aggression, 33.3% continue this behaviour in the first situation during situation simulated on Picture 4, 16.6% increase their fascination with direct aggression (extremely severe physical aggression and acute physical aggression, which is partially prosocial), 5.5% show complete helplessness in the event of personal

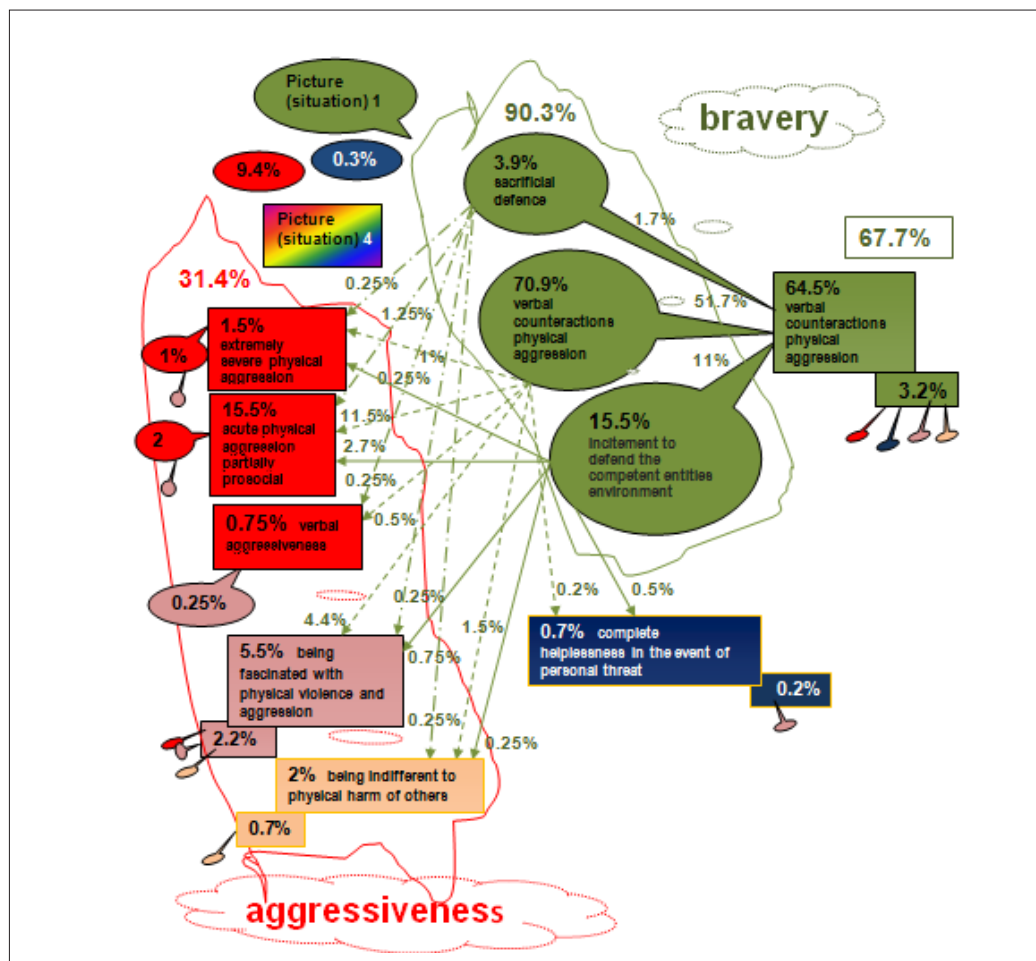


Figure 2. Migration declared actions by the sports activity organizers for the youth (406 men) in simulated situations of physical aggression in the micro scale (results: Picture 1 ovals; Picture 2 rectangles).

threat, whereas 27.7% is eager to call for cessation of aggression. Among 7 of them who are indifferent to physical harm of others, 42.8% confirm this trait also in situation simulated on Picture 4. This is the case of 50% of two women. Two women who revealed during first simulation that they are fascinated with physical violence and aggression confirmed this in situation simulated on Picture 4 (100% stability).

The structure of KS-4M indicators shows primarily the similarity among proportion of cases in which bravery and aggressiveness is exhibited by women and men in two simulated situations (Table 1). There is no statistically significant correlation between the raw results of both simulated situations – for the results of women $r = 0.114$ and of men $r = 0.172$ (the sum of these raw results is an empirical basis for calculating general indicator of bravery/aggressiveness for each person).

DISCUSSION

The results of our simulation studies confirm the veracity of the assumption made by Jarosław Rudniański [17] that a person becomes an aggressive being in particular circumstances. While assuming that, Kalina [14] points out that such a threat occurs when a person undertakes a defensive struggle. Then he sets forth a clear alternative: “while directly preventing destruction done mainly to people by other people (or directly to me), I do not have to become an aggressive being. However, to make it happen – and it is a necessity! – I have to act both fairly and extremely efficiently. Therefore, I have to develop internally and shape my ability of self-defence. And this is perhaps the elementary issue. At the same time, this is the primary thesis of this article” [14, p. 111]. This is a quotation from Kalina’s monograph published in a unique moment – in 1991, two years after the end of martial law in Poland

Table 1. The proportions of the indicators KS-4M projective test.

Level of bravery/aggressiveness		The number and proportion (%) of the bravery and aggressiveness indicators			
WD (contractual units)	verbal characteristic	Women (n = 110)		Men (n = 406)	
		n	%	n	%
bravery					
6	very high	-	-	8	1.97
5	high	55	50	208	51.2
4	defensive tendencies	20	18.18	49	12.07
aggressiveness					
3	tendency to violence	6	5.45	34	8.37
2	high	28	25.45	97	23.89
1	very high	1	0.91	10	2.46

and the initiation of democratic changes as well as two years after the paper of J. Rudniański entitled *A Compromise and a Struggle* [18], which was of crucial importance for development of *agonology*, was published.

Rudniański created broadly justified theory of non-armed struggle [18] (leaving aside the theory of compromise), whereas Kalina [14] included in the monograph quoted not only the theory of defence struggle, but also formulated the basic premises and assumptions of *agonology* developed since 2015 [19] under the name of *prophylactic and therapeutic agonology* [13, 15]. “Bravery”, the opposite of aggressiveness is the elementary theoretical and empirical category of *agonology*. The KS-4 developed at first by Kalina and Supiński and the KS-4M projective test afterwards modified by Kalina [16] is a tool used in *agonology* to measure both phenomena in laboratory conditions.

In previous applications of KS-4M, the authors of papers use general indicators, primarily WD (bravery index) and rarely GWD (global bravery index) – the symbols stem from Polish terms. Both indicators are most frequently expressed in conventional units on a scale from 6 (very high bravery) to 1 (very high aggressiveness) and rarely in score points: WD from 35 to 1; GWD from 66 to 4. The authors applied the KS-4M projective test either to identify bravery and aggressiveness of people with specified traits (athletes, police officers, students, women, men, etc.) or to verify the effectiveness of methods used in therapeutic or preventive programmes. However, it was the

in-depth analysis of the results obtained in the KS-4M projective test which shows methodological and application value of this tool used in *prophylactic and therapeutic agonology*. The results of our studies constitute in a sense a secondary verification of the accuracy exhibited by the KS-4M.

It is worth noting the perceptive reasoning of Jarosław Rudniański (1921-2008), because in the view of empirical argumentation provided in this article the veracity of the assumption that “a person becomes an aggressive being in certain circumstances” [17] is clear. We would like to emphasise that our studies do not verify this assumption, because it is the veracity of hypotheses that is verified in accordance with canons of the research methodology instead of veracity of assumptions. However, numerous original papers ignore this subtle distinction. In-depth studies conducted by Rudniański (i.e. he studied Hinduism at the University of Rome for two years after the end of the Second World War) are enhanced by a very substantial life experience. He was a prisoner of Soviet gulag during the Second World War (after the Soviet invasion of Poland in 17 September 1939). As the soldier of the Anders Army, he participated in the Battle of Monte Casino (1944) on the side of the Allied forces. During the martial law period, Rudniański taught a group of underground “Solidarity” leaders about the theory of struggle. Thus, Rudniański had exceptional scientific and practical competences to assume that “a person becomes an aggressive being in certain circumstances” is true (i.e. from the perspective of methodological correctness, without empirical verification).

The issue of factors which modify actions (i.e. conscious behaviours) and other actions (some of which may be unconscious in certain circumstances) is very complex. Action migration patterns constitute an empirical proof provided in this article (Figures 1 and 2). As during studies each person is exposed to each picture for 20 seconds, there are grounds to assume that the result (pointing to oneself in a simulated situation) means a declaration of action (in *agonology* and *praxeology* omission is also an action). In this large sample of the population ($n = 516$), adults surveyed exhausted all diagnostic capabilities of KS-4M, i.e. identify themselves with conspicuous action (16 in total in both pictures). Specificity of KS-4M reduces the possibility of repeating the actions in an identical manner. Nevertheless, the fundamental methodological criterion is met – five “pairs of adequate actions” (on picture 1 and picture 4, respectively) identify phenomena in line with the objective of the tool. In fact, one “pair” is a set which consists of three elements, because two people on the Picture 1, and one on Picture 4, were identified as showing “extremely severe physical aggression” (1 score point).

Bravery and aggressiveness are the primary phenomena identified. As this identification takes place by “indicating oneself” on Picture 1 and Picture 4, each identification of oneself with an action performed by a person indicated is a theoretical term which allows us to more or less precisely determine bravery or aggressiveness. An important factor modifying the possible range of activities during physical aggression at the micro level is the active intervention of a police officer who uses a baton (Picture 4). In such a case, it is not possible to create a “pair of adequate actions”, if there is no police officer on Picture 1. Logically, it would be unreasonable to determine the same number of score points for simulated action of a police officer and other person on Picture 1. The logical need to differentiate between score points does not, however, interfere methodological correctness of estimating various levels of bravery or aggressiveness, especially that in relation to actions at the micro level the bravery index (WD) results from the conversion of score points summed from Picture 1 and 4.

In the first projection, the respondent has three options to prove their bravery (in hierarchical system): to undertake active defence, counteract verbally or call for police. If a police officer intervenes

in projection shown on Picture 4, the respondent is left (apart from other variants of stimulated actions) with verbal counteraction of aggression directed at society by this police officer and thus testifies ones bravery. Then while evaluating bravery, we have only one “pair of adequate actions” – verbal counteraction. This is at the same time the only one opportunity to prove stability of actions related to exhibited bravery and corresponds to a high level. Very high bravery combines – active self-defence (Picture 1) and verbal counteraction (Picture 4).

In the case of exhibited aggressiveness, it is possible to determine stability of a phenomenon on an extreme level due to “a set which consists of three adequate actions” – selection of one of two projection on Picture 1 and one possible on Picture 4 by the respondent.

In accordance with assumptions listed in the introduction, the KS-4M [16] will support the principle of “pairs of adequate actions” (i.e. identical theoretical terms repeated in both simulations) and furthermore identifies “complete helplessness in the event of personal threat” (inaction). This phenomenon cannot be separated in studies of bravery or aggressiveness by means of simulation methods. Although the phenomenon is subject to detailed analysis particularly in the field of victimology, it cannot be ignored by experts in *prophylactic and therapeutic agonology*.

However, projections repeatable on Picture 1 and Picture 4 (elementary terms) “being indifferent to physical harm of others” or “being fascinated with physical violence and aggression”, when summed up, indicate high aggressiveness. Aggressiveness – as many other phenomena related to human personality – is gradated, which is expressed in varied score points, WD indicator (from 1 to 3 contractual units) and verbalised equivalents. Thus two statements declaring “fascination with physical violence and aggression” equals to $WD = 2$ and “extremely severe physical aggression” – to $WD = 1$. This possible unambiguous (accurate) identification of studied phenomena is provided by a set of five “pairs of adequate actions”. Others are the result of the compilation, which is depicted on Figures 1 and 2.

Migration of actions exhibited by a population of men is definitely more varied, when a factor modifying aggression at the micro level involves

an intervening police officer who uses pro-social aggression (16 such relations have been shown – Figure 1). This number was half that in a population of women (Figure 2).

The population of sports activity organisers for the youth is unique. All of them (women and men) throughout Poland share at least two common features – interest in sport and extracurricular social activity, mainly with junior high students. They devote their free time (for symbolic financial gratification) to social work with school children. Despite what it looks like, formal professional qualifications significantly differentiate sports activity organisers for the youth. The results of anonymous surveys (respondent's (n = 1076) sex was the only one identifying personal trait) correspond with observations performed in 2014 and 2015 during two-day courses whose subject was prevention and therapy of aggressiveness among the youth in each of the 16 Polish voivodships [20]. Each course began with identification of aggressiveness on the basis of direct observation of groups consisting of 6 volunteers (with at least one woman) during three identical fun forms of martial arts [10, 20] (in each group). Only the assistants who had been instructed before knew the hidden objective behind the observation of participants in fun forms of martial arts. In each group, at least 2 persons (33.3%) revealed aggressiveness (or one occasionally). Measurable mental effect of these courses included migration of the declaration to the question “*is aggressiveness in sport desirable?*” (first results before the course and second one after the course): “definitely yes” 7% to 5%); “yes” 47% to 37%, $p < 0.01$; “never” 29% to 46%, $p < 0.01$; „I cannot answer” 16% to 12% [20]. The structure of answers of 846 sports activity organisers after course (“*would you take the trouble to specialize in diagnosis and therapy of aggressiveness based on cognitive behavioural methods?*”): “definitely yes” 13%; “yes” 43%; “no” 17%; “definitely not” 2%; “no opinion” 24% [20, 21].

Thus, there are numerous modifiers. In Kalina's experiment [16] conducted 20 years ago, therapeutic effect was evaluated by means of the KS-4M projective test. During two first semesters of military studies, selected military cadets (n = 19) exhibiting increased aggressiveness participated in special programme based on physical exercises (judo, self-defence), relaxation exercises, verbal actions. The structure of the KS-4M

results before the experiment (numbers provided in parenthesis refer to results obtained after the experiment): very high bravery 10.5% (26.3%); high bravery 21% (26.3%); defensive tendencies 5.3% (15.8%); tendency to violence 10.5% (15.8%); high aggressiveness 26.35% (15.8%); very high aggressiveness 26.35% (0%) [16]. Pronounced one-way migration from aggressiveness 63.2% (a decrease by 31.6%, including diagnostic category of “tendency to violence”) towards bravery 68.4% results from cumulated therapeutic and preventive effects. Therapeutic effect is reflected by a difference of 31.6% between bravery identified after experiment (68.4%) and before experiment (36.8%). The use of the term “cumulated effect” is justified here, as confirmed by the results in the KS-4M control group (n = 75 military cadets trained with traditional methods): before military training bravery 59%, aggressiveness 41%; after training bravery: 42.4%; aggressiveness 57.6% (including high 30.7% and very high 12%) [16].

The results obtained in the studies conducted by Kałużny et al. [22] on the same population of male military cadets (n = 52) after four-year studies confirm the proportion in the control group: bravery 42.3%; aggressiveness 57.7%. It is impossible to determine the baseline for the group of cadets studied by Kałużny et al. [22] as well as in the case of female military cadets (n = 51) after four-year studies in the Military University of Technology in Warsaw (Poland) surveyed by Chodała et al. [23]. Education effects: bravery 70%; aggressiveness 30% are similar to the results obtained by Kalina [16]. They were not surprising because Andrzej Chodała was responsible for physical education of these female military cadets. He performed at the time unique experiments based on martial arts and hand-to-hand fighting, whose results are broadly discussed in two articles pertaining to the validation procedure of “testing fights in a vertical posture” [24, 25].

Some authors of the few articles based on the KS-4M results use more demanding diagnostic criteria (they sum up only high and very high indicators of bravery and aggressiveness, respectively). All these articles were substantially limited by lack of knowledge about bravery and aggressiveness exhibited by persons surveyed (similarly as in articles [22, 23]), before they started particular professional, sports or any other activity. Therefore, it would be flawed to assume

that before these activities particular populations did not significantly differ in terms of these attributes. For example, among police officers who work at prevention ($n = 42$) and at criminal section ($n = 28$) the proportion of bravery to aggressiveness amounts to $41\% \div 59\%$ and $79\% \div 21\%$, respectively [26]. The modifying factor could involve the specifics of professional activity performed by police officers. This proportion (bravery \div aggressiveness) among police officers ($n = 56$) who declared regular physical activity (games, combat sports, individual sports) is as follows: $48.2\% \div 26.8\%$, whereas among the ones who undertake other forms of physical activity or the ones who are not active ($n = 14$) it amounts to: $28.6\% \div 35.7\%$ [26]. The modifying factor could involve sports activity or its lack. Other methods for presentation of the KS-4M results [27-30] prevent us from performing secondary analysis according to methodology adopted in this article.

Another methodological aspect of using the KS-4M projective test includes the sequence of exposed situations. After familiarising oneself with the first situation (micro scale – Picture 1), before being brought to the need of “identifying oneself” in similar situation involving an intervening police officer as a modifying action (Picture 4), the attention of a person surveyed is focused at first to indicating acceptance of actions in the event involving moderate aggression and afterwards to selecting behaviour in a situation involving possible absolute power at the macro level for a short period in time.

Bravery and aggressiveness measured with the use of the verbal simulation method (KK'98 questionnaire [26, 31]) also provide empirical argumentation that certain circumstances in fact modify actions. Nevertheless, the person surveyed is not obliged to follow the sequence of the situations presented. Among 12 simulated situations, 4 which related to aggression at micro level are randomly placed in the questionnaire. Studies performed by Kałużny et al. [32] on a large sample from Polish population ($n = 1472$, ten years after socio-political transformation in Poland 1998-1999, age of respondents 19 to 58) revealed that the awareness of aggressor's goal and a target of physical assault are the factors which highly influence the behaviour of people who are in social environment and in certain relationship with the aggressor. When the goal of

a hypothetical aggressor was to kill the respondents, 60.1% would take up action in line with the criteria related to the right of self-defence (indicating bravery), 29.5% declared that they would respond to aggression with more aggression (very high aggressiveness), 10.4% would not react. During a hypothetical assault on bystanders with no attack's target, declarations were as follows: 78.7%, 21.3%.

These are not the only factors which modify actions (behaviour). While studying 75 male military cadets with the same KK'98 questionnaire two years before, Kałużny et al. [22] found opposite relations. When the goal of a hypothetical aggressor was to kill the respondents declaration are: 33.7%, 66.3% (no one declared inaction). During a hypothetical assault on bystanders with no attack's target, declarations are as follows: 29%, 68.4%, and 2.5%, respectively. Modifying factors involve long-term impact of specific military education.

This multi-dimensional impact of factors on two key phenomena – bravery and aggressiveness – related to functioning of a person in situations involving interpersonal aggression at the micro level but also to possible inaction show the complexity of the necessary therapy and prevention. These are at the same time important empirical premises for *prophylactic and therapeutic agonology* being developed. This is an applied science whose interdisciplinary connections are clearly articulated [13, 15, 19]. A perspective of meaningful clinical applications is opening before specialisation of martial arts bibliotherapy [33-35] which is developed as its part. It is precisely determined by this diversity of factors that modify human actions which make them aggressive in certain circumstances and brave or inactive in other (there are no grounds to conclude that such person always becomes a coward).

CONCLUSION

Aggressiveness is not stable feature and does not distinguish females and males of a similar age, with similar professional qualifications and professional-social activity. For revealing aggressiveness or suppression (more or less conscious controlling) significant influence have circumstances of the situation of acute interpersonal conflict.

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