

# Multidimensional tests as a fundamental diagnostic tool in the prophylactic and therapeutic agonology – the methodological basis of personal safety (*Part I: non-motoric simulation*)

## Authors' Contribution:

- ✍ A Study Design
- 📁 B Data Collection
- 📊 C Statistical Analysis
- 📄 D Manuscript Preparation
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## Background & Study Aim:

The term “human development” has positive connotations and is always associated with the progress for some sake. For example, limb amputation objectively disregards as for the progress (if the medicine is powerless in order to preserve the integrity of the body of the given individual). However, the fact that man after the amputation has successes in the sport of people with disabilities, in professional activities and social, leads a happy family life is evidence of the continuation of multidimensional individual development (mental, motor, social, etc.). The aim of this study is scientific argumentation create multidimensional tests for the diagnosis of positive health and ability to survive in the universal sense.

## Material & Methods:

A critical analysis is based on the praxeological concept of “possibility of action” (dispositional-, situational-, complete feasibility) in opposition to the paradigm of analytical measuring positive health and physical fitness prevailing at views sport science experts and in the practice of physical education and sport for all (recreation).

## Results:

Multidimensional tests of three types: motor, psychomotor, simulation (simulation studies) have the greatest diagnostic and practical value (plenty of information while reducing the need to use measurement tools) among the indicators of positive health and ability to survive. There is also a category of difficult situations (e.g. extremely intense physical aggression, the risk of drowning in the case of extreme physical exhaustion, collision with a vehicle, body injuries), which for ethical reasons and due to the safety of studied person cannot be translated into the motoric simulation. Adequate non-motoric simulation tests used in prophylactic and therapeutic agonology (innovative agonology) provide theoretical terms which allow us to identify three categories of phenomenon's – aggressiveness, bravery, inaction. The KS4M projection test (pictorial) for example measures these three phenomena in an indirect manner. The same case is with the KK'98 questionnaire (written projection tests). The KK'017 questionnaire (written projection tests based on mixed assessments: “efficiency – ethical”) measures human actions in descriptively simulated situations (including extreme ones) according to the following criteria: “effective – ethical (fair)”; “ineffective – ethical (fair)”; “effective – unethical (shameful)”, “ineffective – unethical (shameful)”.

## Conclusions:

After the Cold War and the Iron Curtain moral dilemmas concerning the boundaries of dissemination of scientific knowledge, which they can also use active and potential terrorists. Optimal argumentation provides prophylactic and therapeutic agonology referring to the mixed assessment (praxeological – ethical): the man has the right and the researches the obligation to provide the knowledge, which opens to everyone chance survival ability even in extreme emergency situations. The optimal method of defence against terrorists in a verbal way is permanent monitoring in public space the question – “why you must kill?”

## Keywords:

motor competence • possibility of action • positive health • praxeology • survival ability • terrorism

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**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 [38, 39].

**Aggression** (in praxeology) – is to initiate a destructive fight or move in a verbal dispute over material arguments to those causing distress to the opponent [9].

**Aggressiveness** – a human characteristic is manifesting itself in inclinations to hurt others, to destructive behaviour.

**Aggressive** = virulent, truculent, attacking [9].

**Intellectual violence** – means actions verbal or preserved in a text as well as symbolic actions (mimics, gestures, leaving a group in a demonstrational way to which an entity being subject of intellectual violence had joined, failure to reply the letter, letter, etc.) undertaken by a given person towards specified entity (individual or a group) which result in *ad hoc* or relatively long-term humiliation of an individual in social environment or causing that this entity experiences reasonable sense of harm, mental and/or emotional discomfort along with negative health effects [1].

**Personal safety** – a justified sense of survival ability in various emergency situations, either of external nature (e.g. violence, aggression, unintended fall, fire, tsunami) or internal nature (e.g. stress, disease, fear).

## INTRODUCTION

The term “human development” has positive connotations and is always associated with the progress for some sake. For example, limb amputation objectively disregards as for the progress (if the medicine is powerless in order to preserve the integrity of the body of the given individual). However, the fact that man after the amputation has successes in the sport of people with disabilities, in professional activities and social, leads a happy family life is evidence of the continuation of multidimensional individual development (mental, motor, social, etc.).

These elementary presumptions lead us directly to an assumption that the absence of care for precise language may cause numerous misunderstandings which in extreme cases result in interpersonal conflicts bearing consequences only seemingly on a microscale (a unit versus a unit or a small group). On the other hand, broadly understood consequences meet the following criterion: “omission to act – the intentional killing of given unit or extermination”. A separate class comprises each verbalisation addressed to a specific entity (a unit or even a population) which may be classified as psychological abuse or violence. Insofar as psychological violence is easy to identify, intellectual violence (see glossary) in particular may be effectively hidden for a very long time [1].

The biographies of Marcelino Sanz de Sautuola (1831-1888) and Louis Pasteur (1822-1895) illustrate well the consequences of omission to act on one hand and consistent defence of scientific discoveries made on the other.

Sautuola, an explorer and first scientist who studied rock drawings in the Altamira cave (1875) [2], was loudly ridiculed at the 1880 Prehistorical Congress in Lisbon. The high artistic quality and the unique state of the paintings became an excuse to accuse

Sautuola of forgery. Emil Cartailhac, the well-known French archaeologist, one of the most outspoken opponents of the authenticity of the paintings, confessed that he made a mistake in a sensational article entitled *Mea culpa d'un sceptique*, published in a monthly *L'Anthropologie* (1904) [3]. Sautuola had died 16 earlier and did not live to see his good name being restored and authenticity of the finding be confirmed by Cartailhac. Using the state-of-art research methods, it was determined that paintings of the Altamira cave were done in a period from 11 to 19 thousand years ago. Sautuola did not take up a fight to defend his credibility also because no such tools were available at the time. Ultimately, the immediate effect of the sensational discovery of Sautuola was to ruin his reputation and mental health in particular on a microscale, and social health as far as family and closest friends are concerned. However, it is difficult to discuss the consequences of this discovery on a global scale, apart from correcting the views in the circles of anthropologists, historians and culture experts.

Louis Pasteur, the father of microbiology [4], did not give up defending his findings despite similarly fierce attacks of opposing members of the French Academy of Sciences and some representatives of the so-called public opinion. Regardless of the controversial opinions about the genius discoverer [5-7], Pasteur's determination speeded up development of medicine. This resulted in saving health and lives of many people long before applications verified for the second time. The previous sentence leads to conclusions associated with quality of life of every saved patient and their closest ones. The combination of these successes on a microscale translates into a global effect. It is Louis Pasteur who is associated with the discoverers and visionaries, being associated with the civilisation leap of the late nineteenth century.

Analysis of the second continuum's pole, i.e. "omission to act – the intentional killing of given unit or extermination", very clearly illustrates two issues fundamental to this paper. Firstly, effects of destruction of certain units are only apparently associated with a micro scale; in fact, they may also affect a macroscale. Secondly, although being an open denial of care for mental health and social health and human development, the languages of hatred and manipulation are by no means excluded from public space. On the contrary, expansion of this pathology raises elementary questions about how much of this phenomenon may be tolerated and about survival ability of human civilisation as a democratic society, which guarantees basic liberties and a sense of personal safety (see glossary).

The assassination of Archduke Franz Ferdinand of Austria, heir presumptive to the Austro-Hungarian throne occurred on 28 June 1914 in Sarajevo (an event which only apparently had effects on the microscale) as an excuse to start the First World War (macroscale) is a vivid example. Actual and global effects of this murder do not exceed the hypothetical credibility. Apart from the clear struggle for power, the parallel goals of an entity who ordered this assassination will probably never be revealed.

Only science (or to be precise: people of science) has methodology and tools (tests in order to reliably determine positive health and ability to survive (regardless of the cognitive complexity of these phenomena). The concern for these two values deciding about the quality of life lies with the people of science and people in power. Unfortunately, it is very difficult to use these tests to study people in power, in particular at the highest levels. In a book published in 1983 during a very complicated social situation (martial law in Poland), which is not available on the market, Jarosław Rudniański states: "No *sacrum* exists in the case of people in power who are nearly always protected by a rather tight layer insulating them from the reality they live in and manage, which means that generally there is no impassable moral standard (...). That is why people of science usually do not realise who in fact they are dealing with when they deal with people in power on the scale of the entire Planet." [8, p. 164-165]. All the other members of society dependent on decisions made by people in power do not realise it even more so.

We are still left with a possibility of observing behaviours (a domain of psychology) and actions (which mean purposeful acts, i.e. a domain of praxeology) displayed by people in power in public space and formulating mixed assessments about these actions. Paradoxically, actions taken during a certain category of sports competitions in their youth (in particular when they were students) recorded on electronic media, which may be watched afterwards, may become the most reliable source of knowledge about the people in power.

The aim of this study is scientific argumentation create multidimensional tests for the diagnosis of positive health and ability to survive in the universal sense.

## MATERIAL AND METHODS

A critical analysis is based on the praxeological concept of "the possibility of action" in opposition to the paradigm of analytical measuring positive health and physical fitness prevailing at views sport science experts and in the practice of physical education and sport for all (recreation). The possibility of action can be understood in the threefold sense: logical, evaluative, flexible feasibility or situational feasibility [9]. The author of this article analyses "a possibility of action" in the sense of *flexible feasibility* and *situational feasibility* in relation to methodological and application aspects of multidimensional tests and simulation (simulation study).

### Critical analysis of "the possibility of action" (in the sense of *flexible feasibility* and *situational feasibility*)

*Flexible feasibility* – "(...) power, intellectual or manipulative proficiency and knowledge (ability) and sufficient willingness to carry out given action (...); *situational feasibility* – "(...) carrying out given action in determined circumstances is not prevented by this circumstances." [9, p. 124].

*Full flexible* – "Somebody has full (completed) flexible and situational possibility of action, i.e. has sufficient power, knowledge, and efficiency (intellectual or manipulative) in order to carry the given action out in the moment *t*, possibility of the non-performance of it and has possibility of putting off until later moment of carrying the given act out" [9 p. 124].

**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 a majority of the so-called congress languages (English, German, Russian) and as well: Czech, Japanese, and Serbo-Croatian.

**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 [see also 11].

**Motor** – *adjective* relating to muscle activity, especially voluntary muscle activity, and the consequent body movements [37].

**Motor skills** – *plural noun* the ability of a person to make movements to achieve a goal, with stages including processing the information in the brain, transmitting neural signals and coordinating the relevant muscles to achieve the desired effect [37].

**Psychomotor** – *adjective* relating to bodily movement triggered by mental activity, especially voluntary muscle action [37].

**Simulation** – caused by model an event, which under some circumstances is similar to the event occurring in examined real object [9].

**Perfectionism** – *noun* rigorous rejection of any performance or level of competence that is less than perfect [37].

**Global science space** – conventionally, the global science space is associated with the ability to provide the latest scientific knowledge through prestigious electronic scientific journals [40].

## RESULTS

### Typology of multidimensional tests

Multidimensional tests of three types: motor, psychomotor, simulation (simulation studies) have the greatest diagnostic and practical value (plenty of information while reducing the need to use measurement tools) among the indicators of positive health and ability to survive. Many of these tests may and in fact are used as disciplines or sports competitions by on-demand and uniformed public services (professional formations such as: police, armed forces, border guard, fire service [10, 11]) or as part of survival competition of people who are not members of these professional formations (sport for all). All-round event (e.g. decathlon) is not a synonym of multidimensional tests. However, in particular, as far as military and police all-round events are concerned, at least one competition meets the criteria of multidimensional tests (e.g. obstacle course).

### Motor multidimensional tests

The obstacle course is the most common one. The structure of such tests, as a system of motor tasks (often repeated several times) informs us about muscle strength, speed, agility, whereas test execution time (scheduled for a time from several dozen seconds to even several dozen minutes) indicates endurance (of a specific type).

### Psychomotor multidimensional tests

In this group of tests, at least one task is used to diagnose a specific motor skill. Special Judo Fitness Test (SJFT) is a good example. A judo throw *seoi nage*, repeated for numerous times, is the main element of motor skills used in this test [12]. Another example: the first round of UNIFIGHT comprises a special obstacle strip that includes shooting a pneumatic gun or paintball gun and throwing at the target (adults with a sporting knife, children with a tennis ball) [13]. This special obstacle may be used as a psychomotor *multidimensional test* while learning motor skills (not only for the purposes related to UNIFIGHT).

A special group of tests comprises tests based on two criteria: motor perfectionism (versus the lack of perfectionism) and time needed to complete the task (in a perfect or imperfect manner). If motor perfectionism is about simple repeated postural and locomotion activities, *Rotational Test* will be a good example of the method evaluate the body balance disturbance tolerance

skills [14]. However, if motor perfectionism pertains to special motor skills, a *test of making safe falls* is a good example. Multidimensionality of this test in a motor sense translates into studying of the safe falling skill: rear fall and rear fall with turn; front fall; fall to the side (left and right); front fall with turn over the shoulder (left and right). The time criterion is associated with the motor result. Perfect execution of a safe fall in a motor sense but in a time longer than 20 seconds does not justify the “excellent” score [15].

### Simulation (simulation study)

#### *Motor (psychomotor) simulation*

Often it is difficult to establish the boundaries between *psychomotor multidimensional tests* and *motor simulation*. Some actions are nearly always simulated if possibility of action is primarily disturbed by an external phenomenon that may be directly observed (e.g. a run) and may change the state of the participant's body (e.g. fatigue), and afterwards fatigue is a factor interfering with accurate shot, e.g. from a gun in the shortest time possible. Similar to *motor multidimensional tests*, tests which belong to this category measure a certain aspect of *flexible feasibility*. The use of such tests entails primarily at least one premise which authorises an investigator to make an assumption that this is the change of state of given person which was meant (a prerequisite is as in the example above: a run with submaximal or maximal speed at a predetermined distance) in order to accurately measure phenomenon, being the main observation goal (as in the example above: ability to accurate shot after a determined locomotor effort). It is easy for an investigator to measure both these phenomena, i.e. run and shooting, using contemporary technology. The most difficult issue in the methodological sense is to consider sufficient willingness (in a mental sense) to carry out given action as a true premise.

This dilemma disappears if meeting such prerequisite does not entail an extreme energy expenditure of the person studied. During the *susceptibility test to the body injuries during the fall* (STBIDF) simulation of falling backwards consists of the fastest possible change of the posture from vertical to horizontal (lying on the back) [16].

When the possibility of action is mainly disrupted by motor activities of a man directed towards body of a studied person who remains in close

contact (e.g. hand-to-hand fighting, demerging), or indirectly with the use of, e.g. technological possibilities offered by paintball, the result of such simulation is to be interpreted in terms of *situational feasibility*. At that moment some methodological dilemmas emerge, namely when some motor situation may be considered as a test or when *simulation study* based on motor actions is a proper term. For example, *tests of fights in a vertical posture* (TFVP) satisfy the first criterion [17-19]. Test condition will also be met by a fight during a paintball game one against one on a standardised special obstacle. Nevertheless observations of results obtained both during a hand-to-hand fight (group against the group) and a fight during a paintball game (group against the group), although carried on the identical mat or standardised special obstacle, respectively, may be analysed only as a *simulation study*. A team paintball fight (team against the team) which is the second task of *survival multi-discipline events* [20, 21] may serve as a good example.

Another broad class of simulation may be distinguished. It involves locomotor efforts (e.g. run, climbing, swimming) combined, e.g. with direct interference with actions undertaken by given person or persons (hand-to-hand fighting). The example is exhausting Russian test consisting of a 3000-m run followed by 10 fights with an opponent (armed with a knife or automatic rifle). This test served as the reference one (external criterion) for four other tests [22].

### **Non-motor simulation**

Furthermore, there is also a category of difficult situations (e.g. extremely intense physical aggression, the risk of drowning in the case of extreme physical exhaustion, collision with a vehicle, body injuries), which for ethical reasons and due to the safety of studied person cannot be translated into the motor simulation. Many such situations (well-quantified [23, 24]) must be overcome by on-demand and uniformed public services. It needs to be stipulated that the state-of-art technology allows us to safely study some of these phenomena, e.g. collision of a man with a virtual moving object [25]. However, other phenomena may be studied only using non-motor simulation. As far as projection tests are concerned, in fact, only computer-mediated ones are based on the state-of-art technology. Other ones, i.e. verbal, written, pictorial tests, are easy to use and maybe at most technologically supported.

Appropriate non-motor simulation tests used in prophylactic and therapeutic agonology (innovative agonology) provide theoretical terms which allow us to identify three categories of phenomena – “aggressiveness”, “bravery”, “inaction”. The KS4M projection test (pictorial) for example measures these three phenomena in a direct manner [26, 27]. 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.

Each of the drawn personae in the simulated situation shown in pictures from 1 to 4 is marked with a specific alphabet letter. The task of the examined person is “self-indication”: in situations of physical aggression (pictures 1 and 4, micro scale, Figures 1 and 2); indication of a specific solution in the event of threat of aggression of a foreign power (picture 2, medium scale, Figure 3); indication of decisions in a highly attractive external situation – projection of six possibilities of unlimited power over people and things, albeit for a short period (picture 3, macro scale, Figure 4). Each picture during the research – after prior instruction – should be shown for 30 seconds.

In previous applications of KS-4M, the authors of works 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 [26]. 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. [26, 28-30]) or to verify the effectiveness of methods used in therapeutic and preventive programmes [26, 30].

# 1. PARODYKITE SAVE.



Figure 1. The first picture of the KS-4M projection test (descriptions in Lithuanian).

# 4. PARODYKITE SAVE.

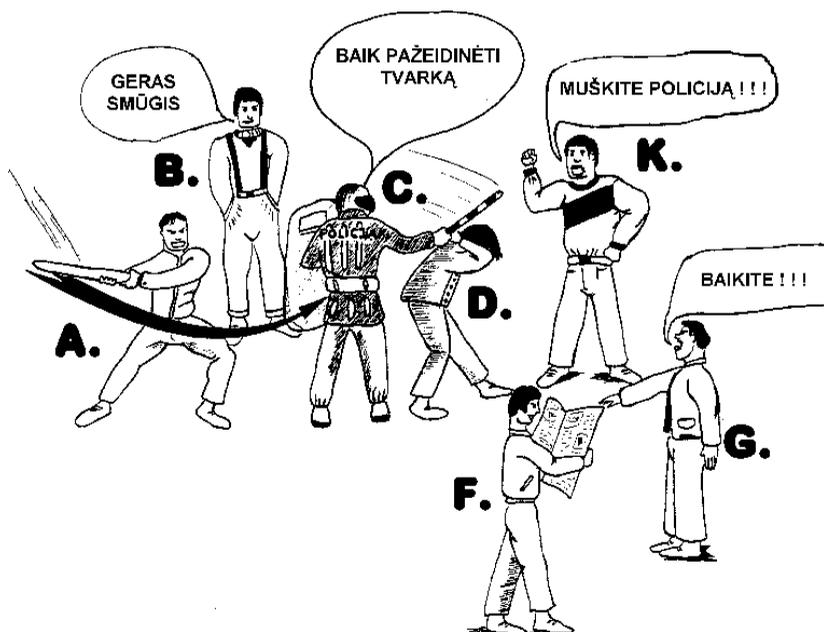


Figure 2. The fourth picture of the KS-4M projection test (descriptions in Lithuanian).

The in-depth analysis by Klimczak et al. [27] 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* (in microscale).

KS-4M, as an innovative agonology tool, is an example of an adequate *non-motoric simulation*, which provides **theoretical terms**, to diagnose tree categories interfered phenomena (which cannot be directly observed) – aggressiveness, bravery, inaction (“stopping of action” – which

## 2. JŪSŲ ŠALĮ PUOLA KITA VALSTYBĖ. KURIAŲ POLITIKĄ PALAIKYSITE ?

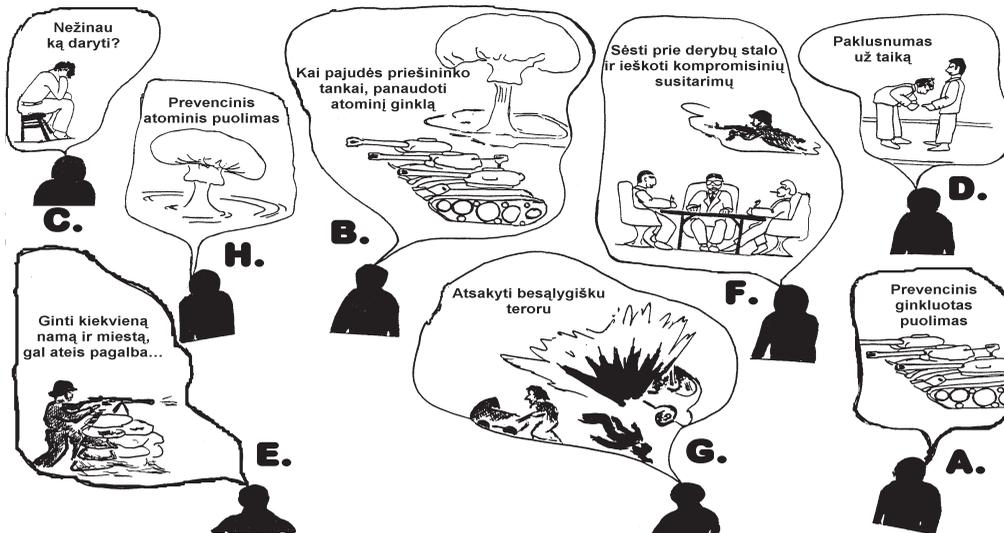


Figure 3. The second picture of the KS-4M projection test (descriptions in Lithuanian).

## 3. ESATE GALINGIAUSIOS PASAULYJE VALSTYBĖS VADOVAS, TURITE NERIBOTAS GALIMYBES. JŪSŲ SPRENDIMAS ?

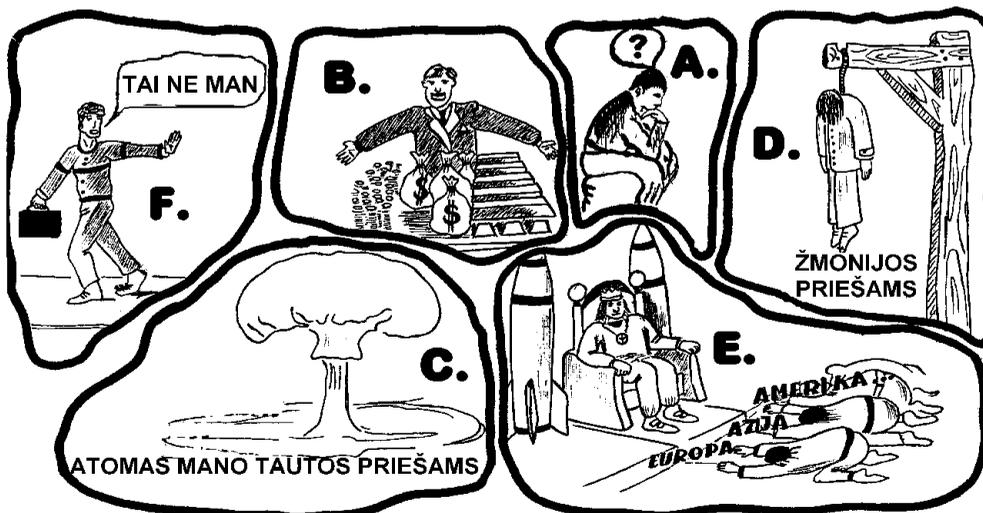


Figure 4. The third picture of the KS-4M projection test (descriptions in Lithuanian).

in the praxeological sense means “acting”). The extreme case of “inaction” is the phenomenon of “complete helplessness in the event of personal threat”). In both pictures one group of simulations prove about: “physical attack”, “fascinating to physical violence and aggression” they indicate aggressiveness. The second group of simulations in theoretical terms, like, e.g. “verbal counteraction”, “sacrificial defence” they are a testimony of bravery. The third group of simulations regarding phenomenon “inaction” they are not theoretical term interfered phenomena „cowardice”. There are **elementary terms**, that is, the projection of behaviour in the motor sense, as indicated in pictures 1 and 4 of the KS-4M test of the person in simulated situations in the microscale (Figures 1 and 2).

Thus, the simulated actions in microscale (pictures 1 and 4) allow answering the basic question: whether factors modifying the circumstances in which at least one person applies severe physical aggression towards another person significantly change the behaviour and actions of people that may influence the further course of these events. However, they also limit the possibilities of interpreting the results of KS-4M as *multidimensional non-motoric simulation* based on the WD index (contractual units): **bravery** WD6 very high, WD5 high, WD4 defensive tendencies; **aggressiveness** WD3 tendency to violence, WD2 high, WD1 very high.

Adhering to this methodology, it is obvious that cumulative observations of behaviour projections

(actions) in microscale (pictures 1 and 4) can be loaded with elementary terms that do not testify either to bravery or aggressiveness. Research results in Klimczak et al. [27] testify that there are only 0.9% women and 0.7% men identifying themselves with “complete helplessness in the event of personal threat” in the sample of the sports activity organisers for the youth population. Therefore, a review of previous studies using KS-4M should not be subject to a significant error (Table 1).

This review provides evidence that two problems still exist. First of all, the need to properly select candidates not only for on-demand and uniformed public services. More than 30% of educators working with a young woman are characterised with aggressiveness [27], also around 60% prevention of Police officers [28] and nearly 70% of military cadets after one year of education [26]. Secondly, it is possible to reduce the aggressiveness of adults even in military training conditions if the methods and means of prophylactic and therapeutic agonology are used appropriately [26].

In addition to Kalina’s work from 1997 [26], there is no empirical data in relation to the GWD (global bravery index). Score raw (points) military cadets before  $41.57 \pm 18.16$  and after the experiment  $11.89 \pm 12.47$ ,  $p < 0.05$  (**tendency to violence-positive change defensive tendencies**). Respectively military cadets from control group:  $47.05 \pm 14.36$  and  $40.9 \pm 13.96$ ,  $p < 0.01$  (**tendency**

**Table 1.** The proportions (%) of the indicators KS-4M projective test in the selected investigation.

Level of bravery/ aggressiveness		The sports activity organisers for the youth [27]		Police officers [28]		Military cadets experimental group (n = 19) [26]		Military cadets control group (n = 19) [26]	
WD & verbal characteristic		women (n = 110)	men (n = 406)	prevention (n = 42)	criminal (n = 28)	before	after	before	after
<b>bravery</b>									
6	very high	-	1.97	10	18	10.5	26.3	18.7	18.7
5	high	50	51.2	14	18	21	26.3	36	16
4	defensive tendencies	18.18	12.07	17	43	5.3	15.58	5.3	6.7
<b>aggressiveness</b>									
3	tendency to violence	5.45	8.37	-	-	10.5	15.58	12	14.7
2	high	25.45	23.89	45	18	26.3	15.58	22.7	30.7
1	very high	0.91	2.46	14	3	26.3	-	6.7	12

to violence negative change deepening the tendency to violence).

The same case is with the KK'98 questionnaire (written projection tests) [31]. The general methodological principles of simulation tests do not change. The specificity is determined by a different form of the tool measuring the given phenomenon. In both cases the same: "aggressiveness", "bravery", "inaction". The results using KK'98 (including comparison with results KS-4M) are available in global science space [11, 32, 33] and publications in Polish [28, 31].

The KK'017 questionnaire (written projection tests based on mixed assessments: "efficiency – ethical" [34]) measures human actions in descriptively simulated situations (including extreme ones) according to the following criteria: "effective – ethical (fair)"; "ineffective – ethical (fair)"; "effective – unethical (shameful)", "ineffective – unethical (shameful)" [35, 36]. The dilemma is disappearing "inaction". It belongs to the category "ineffective – unethical (shameful)". The first results with the use of KK'017 were published by Kałużny and Klimczak in 2017 [34].

## DISCUSSION

The basic criterion for the competence of a specialist prophylactic and therapeutic agonology using *multidimensional non-motor simulation* is adequate psychological, praxiology knowledge and in the field of empirical research methodology (also praxiology).

Klimczak et al. [27] commenting on the methodological aspects of the projection test KS4-M stress: "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 (...) is for some reasons determined by aggressiveness [27, p. 346-347]. They continue to explain this elementary

**Table 2.** An example of the methodological specificity of multidimensional written projection tests: the statements of the KK'98 questionnaire used to diagnose a person in the potential situations of physical aggression threat [11].

The potential situation of physical aggression threat	Description of the situation in the questionnaire	The arrangement of extreme answers	
		passive behaviour (0 points) <i>contradiction of bravery</i>	active behaviour (4 points) <i>testimony of bravery</i>
A physical assault on a person whose relations with the respondent and the fierceness of the assault have not been determined.	If in your presence another person were physically assaulted,	"I would not defend him/her."	"I would always try to vigorously defend him/her, observing the rules of the noble fight."
A physical assault on the respondent without specifying the fierceness of the assault.	If you were physically assaulted,	"I would try to escape, and if it were impossible, I would not counteract it actively."	"first I would try to restrict his/her movement, and if it were impossible, I would use severe forms of physical constraint."
A physical assault on close friends and family with intent to take their life.	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,	"I would not take the risk of defensive action."	"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."
A physical assault on the respondent with intent to take his/her life.	If you were firmly convinced that someone else's physical aggression aims to take your life,	"I would ask him/her to abandon this act not taking other action."	"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."

methodological: “If bravery is an opposite to aggressiveness (...), 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.” [27, p. 347].

More references to the methodological aspects of research based on a multidimensional test (mainly psychomotor) are in a separate publication in this journal (Part II: *motor and psychomotor multidimensional tests*). The extended “discussion” in part II of this work, in my opinion, should draw attention to the complexity in the cognitive and methodological sense of two problems. First, multidimensional tests and research simulation. Second, the perspective, but above all the necessity of many applications in the preventive and therapeutic dimensions.

## CONCLUSIONS

After the Cold War and the Iron Curtain moral dilemmas concerning the boundaries of dissemination of scientific knowledge, which they can also use active and potential terrorists. Optimal argumentation provides prophylactic and therapeutic agonology referring to the mixed assessment (praxeological – ethical): the man has the right and the researches the obligation to provide the knowledge, which opens to everyone chance survival ability even in extreme emergency situations. The optimal method of defence against terrorists in a verbal way is permanent monitoring in public space the question – “why you must kill?”

This conclusion is also the main premise of the second part of this work, which appears in the Archives of Budo Science of Martial Arts and Extreme Sports.

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