Fun forms of martial arts in positive enhancement of all dimensions of health and survival abilities

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Abstract

The world is changing, and apparently Japanese youth are more likely to choose American baseball than the native martial arts. The aim of our work is arguments to justify the benefits of fun forms of martial arts as a universal means of enhancement of all dimensions of health and survival abilities, developing intellect, building an ethical attitude, breaking down the barriers of inability, etc., which are available to anyone with only limited professional intervention. The most general division of fun forms of martial arts includes two aspects: the utilitarian and the health one. Dividing fun forms of martial arts according to the health aspect first of all applies to relationships with three manifestations of health (somatic, mental, social), and within each manifestation there is a diagnostic and adaptive factor (this one divided into the prophylactic and therapeutic one). For example, part of fun forms of martial arts of the category “1–avoiding a collision” and “8–comprehensive settling of close combat” is useful both for diagnosing aggressiveness (it is one of the most popular indices of mental health) and for reducing it (the therapeutic factor). These categories of fun forms of martial arts also have a prophylactic significance in the sense of preventing injuries to the body as a result of a collision with an object in motion. It is clear how extensive can be applications of specific fun forms of martial arts – the known ones and those that can only be invented.

Key words: counter effectiveness • difficult situations • non-aggression • nonviolence • preventing injuries • self-defence skills • safe falling skills

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**Introduction**

Jan Harasymowicz very aptly notes that during a fight various aspects of human nature are revealed – anxiety, aggression, pride, vanity, skills, physical dispositions, knowledge, and interdependence between these characteristics [1]. This directly corresponds to various forms of hand-to-hand fighting.

Contemporary sport has developed many varieties of team games where some of these features characterising all or most team members determine the success – pride marked by modesty, high skills and physical dispositions, knowledge and harmonious interdependence between these traits. If team members are characterized by anxiety, aggression, pride (understood as the lack of modesty), vanity (unjustified pride), then success can only be accidental, usually as a result of an even greater intensification of these negative characteristics in the opponent.

In every type of hand-to-hand fighting as well as in a non-sport confrontation (one against one or one against a group) success is determined by an accumulation of positive characteristics and their interdependence. Conflict with oneself is deadly. A single warrior can only count on himself. The opponent’s mistake can prove to be an ally, but to use such circumstances, one needs to be optimally prepared.

Harasymowicz goes on to say that learning martial arts (or arts of self-defence) allows recognising that a fear of failure cripples the human capacity for proper, intelligent action, that aggression obscures understanding, that vanity, a lack of physical disposition, knowledge, perseverance and skills are suicidal. Such learning shapes an attitude of a watchful observer and acting skills in accordance with the laws of nature; it highlights one’s own weaknesses and the need to cooperate with others in overcoming them. Training develops human disposition and allows him/her to overcome anxiety and complexes that trigger aggression towards others. So it is – contrary to appearances – a path to non-aggression (non-violence) [1,p.10].

Since a single warrior can only count on himself and possibly on a favourable combination of circumstances, then what need for cooperation with others does Harasymowicz mean? Clearly, he means the learning process rather than the acquisition of skills and experience by fighting to the death. Therefore, in 1978 (three years before the introduction of the martial law in Poland and in the initial period of the expansion of Japanese, Korean, and Chinese martial arts to Central and Eastern Europe) Harasymowicz formulated a general pedagogical (humanistic) principle of modern training of primarily arts of self-defence and only then in a wider perspective of martial arts (assuming that any martial art is also an art of self-defence).

The world is changing, and apparently Japanese youth are more likely to choose American baseball than the native martial arts. Many coaches of the so-called energetic sports and sports games lack an awareness that the repetition of the usual training schemes, typical of specific disciplines and events, actually slows the progress. Athletes are sometimes unmotivated to intensify efforts, and soon they succumb to fatigue. The few who reach for fun forms of martial arts are discovering new opportunities of a creative influence on individuals and the whole team.

With such generally depicted premises, the aim of our work is arguments to justify the benefits of fun forms of martial arts as a universal means of enhancement of all dimensions of health and survival abilities, developing intellect, building an ethical attitude, breaking down the barriers of inability, etc., which are available to anyone with only limited professional intervention.

**Inspirations and Warnings Straight from the Antiquity and the Middle Ages**

In different cultures of the Ancient times, in the short periods of rest between wars, many forms of hand-to-hand fighting were among some basic entertainment for courtiers and the commoners. In the Antiquity and the Middle Ages duelling was a plague [2].

In ancient Greece, wrestling was the mildest form of hand-to-hand fighting. Brutalisation came with combining wrestling with boxing (pancratium), which quickly gained popularity among viewers.

In Japan the most popular was sumo – a type of wrestling, but in fact a combination of ceremonial and sport elements. At the turn of the old and the new era fights were brutal; very often they ended in the death of one of athletes. Since year 734 sumo became part of the court tournament, and since year 824 court tournaments began to be played from the 16th day of the month. The fall of popularity of sumo at the end of the 16th century revived illegal street fighting (banned by the edict in Edo in 1648), which had nothing to do with gentleness [3,4]; revived, because already four centuries earlier a Samurai risked exile or confiscation of goods for publicly beating a person (article 13 of the Goseibai-shikimoku, 1232) [3].
During knights’ tournaments, fighting with the use of dull weapons was a relatively mild form of fighting in close contact, aside from wrestling. The introduction of firearms revolutionised the formula of duels [2], although still for a long time decisive moments of battles and skirmishes were settled in direct confrontation, including hand-to-hand fighting. Tournament fighting had the advantage of increasing survival abilities on a battlefield for both the victors of the tournaments and the defeated ones.

Viewers have been an important part of tournament fighting till today. It is astonishing that some rulers tolerated brutality, and they even inspired bloody spectacles themselves, while others banned them [5]. Also Church authorities opposed the practice. Speaking in the modern language, opponents of the practice were aware of the pernicious impact of watching extreme violence and aggression, including the public killing of people, on the mental and social health status.

It is remarkable that in the 16th and 17th centuries ecclesiastical authorities issued ordinances, edicts and bulls prohibiting young commoners to participate in wrestling bouts [6]. At that time, wrestling was recommended by outstanding European thinkers, doctors, mathematicians, and humanists as health exercises and optimal physical education means.

This dilemma is still valid. There are numerous interest groups promoting neo-gladiatorship. There are also many kind-hearted people who lack, however, interdisciplinary knowledge, personal experience and courage to oppose the practice, although probably for many violent, bloody fighting in cages is unacceptable mainly for aesthetic reasons.

For the creators of fun forms of martial arts, regardless of their cultural background, no violent form of combat constitutes a model. Yet one fundamental conclusion comes from this brief review. The fact that an individual or even a very large community does not accept any form of violence, even more so extreme aggression, does not mean that others adhere to this principle to a similar extent. We appeal here to the elemental principle of responsibility for one’s own actions and the safety of the circle of the closest people (family, friends, a cultural or religious community, etc.). To dispense with an opportunity to optimally prepare oneself and the loved ones to defend the principal values, including health, life and dignity, means a conscious withdrawal to the position of a potential victim.

**Pessimistic Empirical Arguments**

Recent empirical studies of young Polish women studying physiotherapy [7], tourism and recreation [8], physical education [9], and nursing [10] provide results which indicate important drawbacks of the educational system, considered from the perspective of preparing a person to function in difficult situations. The studies regarded the profile of a sense of positive health indices and survival abilities. The profile was based on the subjective sense of various positive health indices covering three dimensions: somatic A, mental B, social C (these letters and “D” symbolize these variables in a special protocol SEPSA) and D dimension, which represent a sense of indices and assessment reflecting an individual’s survival abilities.

The studied women (declaring either occasional physical activity OPA or daily physical activity DPA) on a five-grade scale assess their own survival abilities the lowest (except nursing students) (mean OPA: 2.956 to 3.920; DPA: 2.828 to 3.895). Two specific indices are symptomatic: safe falling skills and self-defence skills (Table 1).

Nursing students’ results are, however, surprising as, despite the declared occasional physical activity, they assessed their self-defence skills the highest among the tested groups. Yet declarations of physical education students concerning their safe falling skills (4.258 points) are not astonishing. Everyone participated in a basic judo course. One has to agree then

| Table 1. Indices of safe falling skills and self-defence skills declared by Polish female students differing in their physical activity (daily – DPA; occasionally – OPA) |
|---------------------------------------------|-------------|-------------|-------------|
| **Female students & references** | **Cardinality [number]** | **Safe falling skills (points)** | **Self-defence skills (points)** |
| | OPA | DPA | OPA | DPA | OPA | DPA |
| Physiotherapy [7] | 100 | 22 | 2.79 | 2.600 | 2.420 | 2.400 |
| Nursing (including 2 males) [10] | 52 | - | 3.810 | - | 3.920 | - |
with conclusions of the authors of these papers that it would be the most interesting cognitively to confront such declarations with the diagnosed indices. Pilot studies (yet regarding the somatic dimension) indicate a significant discrepancy. There is no clear trend. Some declarations are overstated, others understated and some are characterized by high compatibility with the fairly diagnosed result [11,12].

**Universal Assumption of Self-Defence Training**

The premises presented in the Introduction and the next two sections directly lead to a reflection on the formulated by Kalina [13, p. 43] universal assumption of self-defence training: “if you have learned to act effectively, wisely and nobly in a situation, in which the goal of someone’s actions would be harming or killing you, each different situation would be incomparably easier and you will certainly solve it”.

The ability to decipher this assumption and implement it into practice means stimulating a pupil to act in every situation in an efficient and dignified manner.

**Mental Bridge with the Tradition of Fighting on the Border of Fun**

People of different ages and cultures who in a certain way were enslaved, threatened and, above all, were highly motivated to gain or regain freedom could camouflage defence education on the border of fun and dance. Indian kalaripayatt [14] or Brazilian capoeira, which is assigned African roots [15], are good examples.

In Poland, during the period of lost independence due to partition made by the three neighbouring empires, the first one in 1772 by Russia, Prussia, Austria; the second one in 1793 (by Russia, Prussia); the third one in 1795 (again by Russia, Prussia, Austria), fighting with riding crops was very popular. The *riding crop* was a shaft weapon, a form of baseball bat, (with a length of 80 centimetres to 1 meter, with a diameter of approx. 2.5 cm, made of hard wood, often equipped with a basket made of wicker) used as a training weapon when learning sabre fencing. The riding crop fight was also a popular form of recreation among young people until World War II [16].

Fighting with sticks was popular in many cultures and countries (e.g.: Zulu fighting with sticks in South Africa, different styles of *wushu* in China, the Philippine *arnis*, Balintawak, *kali*, escrima, estocada, *doce pare*, *grand canne* in France, *bo-jutsu*, *jo-jutsu* (Jōdō), *aikido* (aikijio) and some karate schools in Japan, *shim gum do* in Korea; Portuguese stickfighting *jogo do pau*).

Systems of fighting without weapons created by Buddhist monks, masters of Okinawan karate or Korean taekwondo [17-22] had a similar defensive purpose, but also a clear link with health training and moral education. Szymankiewicz and Śniegowski [19, p. 29] reiterate that martial art training, whatever it is, caters primarily to two human needs: getting rid of fear in everyday life and experiencing thrill and discharging aggression in a safe way. It can be added that it is an important factor for group integration, although its essence is to develop individuality.

In the traditionally understood martial arts training, whatever it is, there is no place for *fun forms*. Harsh discipline of formal exercises (*kata, poomse, etc.*) is one of the basic canons, just as the need to respect the rules and fight ethics in *randori, kumite, etc.* There is still a significant factor in the one-man leadership and absolute subordination to the teacher (master).

**Fun Forms of Physical Activity and Fun Forms of Martial Arts in Different Cultures**

It is difficult to clearly indicate the reason why fun forms of physical activity and especially *fun forms of martial arts* have developed in some cultures and not in others, and why it is not easy to adapt them to educational systems of particular countries.

All *fun forms* of activity exclude violence somehow by definition. If a hypothesis about the camouflaged defence education of people who in the past were enslaved in some way, who did not have legal access to weapons and formal opportunities to learn martial arts is true, it seems obvious that training destructive fighting would be counter effective for a number of reasons. This means that instead of the goal, neophytes of such a solution would achieve its negation. Such is the meaning of the term “counter effectiveness” (counter productive) in the language of praxeology [23].

Interpretation of this phenomenon among nomadic herding peoples seems easier. For shepherds responsible for the safety and the quality of the herd, various forms of wrestling were, on the one hand, a form of daily or occasional entertainment, on the other hand, a form of defence training, and thirdly – a way to enhance their health. Probably children spontaneously imitated these fights naturally giving them a fun character. Fights based on aggressive measures would be counter effective in the sense that with time the herd
minders would lose their ability to protect it and the ability to attain economic goals.

Perhaps the above argument explains the phenomenon of a relatively large interest of scholars and trainers from countries of the former Soviet Union (Georgia, Russia, Ukraine, etc.) not so much in fun forms of martial arts as in the use of games and motion amusements in training, especially youth, combat sports: judo [24-27], wrestling [28], kickboxing [29]; and in physical education [30].

Also in Poland, the popularity of motion games and amusements in physical education, sport and recreation has a long tradition [31-34]. Bondarowicz belongs to precursors of teaching team sports in the form of fun [35]. Jaskólski recommends both judo and games (mainly in the form of fighting) as optimal measures in achieving the objectives of physical education [36]. Together with co-authors he recommends fun forms of martial arts in a monograph devoted to biological and pedagogical basics of the system of sports training [37]. Glaz and Kuźnicki advocate fun and games in judo and wrestling training [38], while Cieplicki and Witkowski are the authors of a unique set of exercises with a skipping rope and a rope to use in judo training [39].

The only known work dedicated to fun forms of martial arts was published in Polish in 2000 by Kalina and Jagielło [40]. Published three years later in English and Polish Combat sports propedeutics – basics of judo [41] was implemented in educational practice.

**Divisions and classifications of fun forms of martial arts**

The most general division of fun forms of martial arts includes two aspects: the utilitarian and the health one. This logical division arises from the adopted assumptions [40, p. 9] which are presented in this work in a shortened version with some modification.

The first assumption is that the complementary nature of the influence of combat sports and hand-to-hand fighting exercises on the human system, with a clarification that it is used by a competent teacher, is mainly manifested in the fact that in one, so to say, stream of time (special exercises and training or tournament fights) there is an accumulation of stimuli of both a biological and a cognitive nature in the broad sense of the word. The essence of close combat lies in the need to activate both those biological mechanisms and functions of the body that are responsible for controlling the motor system and the use of energy resources and those that control the psyche, including the intellect and the heuristic sphere. In general, very large dynamics of events of close combat and the diversity of undertaken actions (the need to predict the opponent’s movements, making optimal choices and processing them into motor actions adequate to the changing situation [42]) requires courage to adopt creative and non-standard solutions, to overcome the fear of failure or injury, to have faith in one’s own abilities.

The second assumption accentuates the peculiar value of combat sports and hand-to-hand fighting exercises in moral education of a human being. Unlike most sport disciplines where performance evaluation (effective – ineffective) dominates almost exclusively, here there is also ethical assessment (fairly – shamefully). In fact, combat sports are based on mixed effective–ethical evaluations (when training fights, and especially tournament fights are subject to evaluating). Basically, an objective compilation of effective – shamefully assessments is possible to some extent – when in the course of a bout the winner received statutory penalties, except for disqualification, but ultimately won as a result of a greater number of collected points. However, in many cases (not necessarily ending in disqualification), the ethical assessment shamefully paradoxically takes the value of performance assessment. The one who breaks the rules loses (penalty points), despite the fact that the opponent has not documented his advantage with necessary points or in any other way.

These assumptions fully refer to fun forms of martial arts. An external entity (judge) who would settle the outcome of each bout in any fun form of martial arts becomes unnecessary. Self-assessment of one’s own and the opponent’s actions (according to the above explained criteria of mixed assessments) and an awareness that the opponent also makes such self-evaluation has the largest educational value.

Regardless of the adopted assumptions, a zealous critic would find the division of fun forms of martial arts according to the utilitarian and the health aspect crippled in the theoretical and the purely practical sense. Learning safe falls, whether it is based on the methodology of formal exercises or in accordance with a fun formula, only seemingly has the same health and utilitarian meaning. An adept reduces the likelihood of injury in a situation of a loss of balance and fall (the health aspect), which in the course of hand-to-hand fighting additionally does not diminish his chance of ultimate victory (the utilitarian aspect). That critic can make similar argumentation with regard to the effects of self-defence skills. An
aggressor’s efficient attack can cause not only the victim’s physical injury but even lead to his/her permanent disability or death.

A thorough analysis of the issue will dispel doubts. Formal exercises of safe falls and self-defence allow repeating only certain sequences of movements, but not situations that will surely happen at a predictable time and place. A track and field athlete specialising in long jump or triple jump knows what actions he has to repeat, how many times and in what intervals in order to succeed, and he knows the exact dates and places of the most important competitions.

Fun forms (of falls and the necessary prevention of aggression) are always a certain simulation of events that only in some respects are similar to situations that can happen unexpectedly sometime in the future. A person preparing to self-defence will increase the likelihood of survival if in the course of many simulations of events which cannot be excluded he/she can not only make relevant decisions but also perform appropriate motor actions. To avoid hitting or any other form of attack, one time this may be a jump backward, another time sideward or forward. The question is not about the record time, but the appropriate reaction time, coordinated movements of the body segments which are the most vulnerable and those that, in the circumstances, should be used to thwart another attack.

Kalina and Jagiello [40] adopted objectives of actions as the main frame of reference for the classification of fun forms of martial arts. They distinguished 8 groups of fun forms of martial arts: 1) avoiding a collision; 2) putting the opponent out of balance; 3) releasing oneself from grips; 4) restraining the opponent’s movements; 5) removing the opponent from the area; 6) putting the opponent in a specified place; 7) defending the territory and property; 8) comprehensive settling of close combat.

Almost every fun form of martial arts attributed to a specific category (set) occasionally repeated can be used as a specific test of an ecological type (a diagnostic property); repeated many times, it becomes a means of modifying the body in a motor, energy and/or mental sense (a preventative or therapeutic property).

Dividing fun forms of martial arts according to the utilitarian aspect applies to 2 categories of properties: diagnostic and adaptive ones. Another division distinguishes, as part of diagnostics, the possibilities of applications in sport, self-defence training, military training, training of emergency and security personnel, and within the framework of adaptive expectations – specific motor effects (skills) associated with all, some or one of the 8 distinguished categories of actions.

Dividing fun forms of martial arts according to the health aspect first of all applies to relationships with three manifestations of health (somatic, mental, social), and within each manifestation there is a diagnostic and adaptive factor (this one divided into the prophylactic and therapeutic one). For example, part of fun forms of martial arts of the category “1 – avoiding a collision” (Figure 1) and “8 – comprehensive settling of close combat” (Figure 2) is useful both for diagnosing aggressiveness (it is one of the most popular indices of mental health) and for reducing it (the therapeutic factor). These categories of fun forms of martial arts also have a prophylactic significance in the sense of preventing injuries to the body as a result of a collision with an object in motion. It is clear how extensive can be applications of specific fun forms of martial arts – the known ones and those that can only be invented.

Optimistic empirical arguments

In the ongoing for over twenty years own research (or in cooperation with researchers from different centres in Poland and abroad) on the application of the fun forms of martial arts for utilitarian and health purposes, almost all of the issues covered here have been empirically verified.
The diagnostic and adaptive value of *fun forms of martial arts* for a use in sport [43-45], military and police training [13,46-50], intervention services, bodyguards, security and emergency services [51-53], as well as self-defence training [42,54] is high.

The use of specific *fun forms of martial arts* in the health aspect proved especially effective. The possibility to diagnose aggressiveness [13,40,55,56] and therapy aimed at reducing it [13,54,57] were verified the earliest. Declarations of nearly 60% of animators of sport for children and youth from all over Poland interested in obtaining such qualifications are a significant social effect. In 2014 and 2015 they participated in one-day courses and workshops dedicated to this issue [58,59]. One cannot overestimate the importance of this achievement, since violence and aggression at school are still an open problem [60,61].

No less promising is the prospect of application of *fun forms of martial arts* on a larger scale in diagnosing the vulnerability of people of all ages to injuries during a fall [62-66] and in prophylaxis. Unique preventive effects concern healthy elderly persons, but also those classified in different risk groups [67-69]. Practising safe falls in forms of play proved to prevent effects concern healthy elderly persons, but also those classified in different risk groups [67-69]. Practising safe falls in forms of play proved to be important means of prevention and kinesitherapy of patients diagnosed with moderate or high mental impairment and intercurrent mental disorder (schizophrenia, anxiety-depressive disorder or abnormal behaviour) [70].

**Conclusion**

Each day, all over the world, the primary recommendation of doctors concerning clients’ (patients') physical activity for health purposes boils down to three words: walking, running, gymnastics. The more affluent ones are recommended additionally or alternatively: aerobics, cycling, golf, swimming, tennis, yoga etc. or training under the guidance of a professional personal trainer. Those from the first category of recommendations after some time of systematic exercises usually achieve a cardiological effect and a periodic improvement in muscle strength. Those who can afford the second variant, in addition, improvement in coordination, body balance, and flexibility. Still many of the former and the latter will be helpless when suddenly they lose balance, collide with the hard ground or a vertical obstacle, or even without losing their balance they collide with an object that is in motion (a vehicle, a thrown object, etc.). The listed forms of movement do not prepare a human being to these events optimally or at all. The more so they do not prepare people for the necessary self-defence.

The cardiological and all other effects will be achieved by a person who is able to rationally use *fun forms of martial arts* in his/her systematic physical, intellectual and mental activity. Moreover, with a limited professional intervention he/she can diagnose not only aggressiveness of those from the closest circle in advance, but also become aware of their weaknesses and other traits (anxiety, shyness, vanity, etc.) which they cannot overcome by themselves. Such an animator of family activity or of a group of friends can play a role of a volunteer of rational prophylaxis or even therapy.

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Jagiełło W et al. – Fun forms of martial arts in positive enhancement...
Mental healthcare affect the other dimensions of health. An increase in mental health can come as a result of increased physical activity, and good mental health can then lead to an increase in self esteem as mental performance improves. Greater self esteem then leads to more confidence in social situations and can lead one to ask the larger questions about life leading to increased spiritual health.