

Effect of eastern martial arts on bringing up and behaviour of children and adolescents in the opinion of sensei and parents or caregivers

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:

Martial arts involvement among children and adolescents has been described in many controversial terms. The study of the effects of martial arts training on youth show lot of contrasting images. While some refer to enhanced personal and social opportunities for those that participate in martial arts, others warn against increased levels of aggressiveness and antisocial behaviour among its participants after trainings. The aim of this study are the psychological and social effects of martial arts training of children and youth in the evaluation of coaches and parents or caregivers.

Material & Methods:

The research was conducted on group of 47 sensei (coaches) and 137 parents or caregivers of children training karate. Among sensei group there was a division due to the size of the club: small up to 200 members (53%) and large from 200 members including (47%). Research tool was the original questionnaire survey consisting of two part: A Survey for Sensei (coaches) and Survey B for parents or caregivers of children who regularly train karate.

Results:

More than half of respondents do not notice problems with self-discipline and concentration (57%). In addition, the size of the clubs do not differentiate substantially this opinion. The majority of respondents noticed significant changes in behaviour of children (72%). The size of the club influences this phenomenon. Much more often, changes in children are declared by the sensei of big resorts (86%). The study revealed that the parents or caregivers of girls pointed out most frequently (33%) self-defence as the item, which they associate the concept of martial arts. Among parents or caregivers of male training groups martial arts are associated with individual development (46%).

Conclusions:

The participation of children in karate training has a positive effect on their behaviour, regardless of gender. Positive exposure on behaviour of karate training groups is more clearly visible in large clubs (more than 200 members). The most common reasons for taking karate training is to develop character and positive impact of physical activity on training groups' development therefore karate like other martial arts should be recommended as optimal form of health-related training for children and youth or part of PE.

Key words:

aggression • combat sports • education • self-defence • training

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PE – abbreviation of the physical education [46].

Sensei – Japanese honorific term that is literally translated as “person born before another” (also: someone who has achieved a certain level of mastery e.g. martial artists).

Sports psychology – noun the scientific study of the mental state of sportspeople, looking at issues such as motivation, concentration, stress and self-confidence [46].

Sport psychology – is an interdisciplinary science that draws on knowledge from many related fields including biomechanics, physiology, kinesiology and psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors [47].

Combat sport – noun a sport in which one person fights another, e.g. wrestling, boxing and the martial arts [46].

Combat sports – are a competitive contact sports with one-on-one combat. Determining the winner depends on the particular contest's rules. In many combat sports, a contestant wins by scoring more points than the opponent or by disabling opponent [48].

Martial arts – plural noun any of various systems of combat and self-defence, e.g. judo or karate, developed especially in Japan and Korea and now usually practised as a sport [46].

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 [49].

Aggression (in praxeology) – is to initiate destructive fight or move in a verbal dispute from material arguments to those causing distress to the opponent [50].

INTRODUCTION

Involvement in martial arts on the example of karate can be described in many controversial terms. It is generally known, that perception on the value of martial arts' training is various and can have different outcomes. According to experts, these common beliefs with regard to practice of martial arts are very often based on perceptions and ideas taken from the social media and entertainment industry [1-5]. It is well known, that social media, cinematography and present world have created distorted image of martial arts for entertainment purposes [6-8]. Most of information that have been shown in mass media, or even on the street, encourage young generation to participate in martial arts trainings and search for more information about it [9-11]. The two sides of the perception regarding the effects of training karate is probably even more apparent, while it involves youth.

First of all, martial arts involvement is considered as source of provision with positive learning opportunities for youth in general, as well as with regard to specific groups of population. As an example, research among countries of the European Union Physical Education Association (EUPEA) indicated that in the most of countries that were taken into study, martial arts are introduced in physical education classes, or additional forms of activity in secondary schools, because it is believed that practicing martial arts can provide positive educational opportunities to pupils and increase their physical, and mental health [12, 13]. That is positive alternative for ordinary physical activity and children finding martial arts as much more interesting than other forms of activities. Essentially, when they see movies with actors, that practice karate, kung-fu and other forms of martial arts. For example: Jackie Chan, Bruce Lee, Steven Seagal could be some authorities that they want to follow. What is more, specific initiatives have been introduced in several countries where educators, psychologists and welfare workers make use of martial arts and similar activities in their work with socially deprived youth and young criminals. Practicing karate and other martial arts by corrupted young people is good alternative for their criminal interests and may help them adapt to the society instead of joining gangs and some extreme and dangerous ethnic group [14-20].

Notwithstanding, from the other side, the relationship between practicing some of the martial arts and the adolescents of the youth has been shown by other authors as a problem because of the assumption,

that it leads to negative socialization processes and demoralization. As an example, boxing is dangerous. Many authors have pushed to ban this type of sport for youth under 16 years old on social, medical, philosophical and ethical grounds. For example, one of them said “(...) *there is no place in contemporary society for a youth sport which has, as its primary goal, the infliction of acute brain damage on an opponent*” [21]. This perspective becomes even more true and brought into light by researchers, as young participants seem to become more interested in fighting and increasingly involved in even harder types of martial arts (e.g., Thai boxing, mixed martial arts) [7, 8]. Perfect example may be seen in Thailand, where even children between five and nine take part in Thai boxing and later start professional fights when they are between 12-14 years old [22, 23].

The aim of this study are the psychological and social effects of martial arts training of children and youth in the evaluation of coaches and parents or caregivers.

MATERIAL AND METHODS

Participants

The research was conducted on group of 47 sensei (coaches) and 137 parents or caregivers of children training karate. Among sensei group there was a division due to the size of the Club: small up to 200 members (53%) and large from 200 members including (47%).

Tools

Research tool was the original questionnaire survey consisting of two parts. The first part was for Sensei (Questionnaire A) and consisted of five questions. The second part consisting also of five questions was for parents or caregivers (Questionnaire B). The questions are presented in tables.

Statistical analysis

Analysis of the collected data was performed using STATISTICA v.10 (Statsoft, US). The results are presented in the form of numbers and fractions. To verify the test the relationship between qualitative features chi² independence test was used. In the analysis as the significance level adopted $\alpha = 0.05$.

RESULTS

Senesi opinion

Most of the respondents do not notice problems with self-discipline and concentration (approximately

Table 1. Responses from the Questionnaire A (sensei n = 47).

Question	Karate club		Σ	p
	small	large		
Q1 Do you see during the training the problems with self-discipline and concentration in group?				
Yes	11	9	20	0.831
	44.0%	40.9%	42.6%	
No	14	13	27	0.831
	56.0%	59.1%	57.5%	
Q2 Do you see during the training positive changes in behaviours of trainees?				
Yes	15	19	34	0.0391*
	60.0%	86.4%	72.3%	
No	10	3	13	0.0391*
	40.0%	13.6%	27.7%	
Q3 Do you see significant differences in training process between girls and boys?				
Yes	13	10	23	0.654
	52.0%	45.5%	48.9%	
No	12	12	24	0.654
	48.0%	54.5%	51.1%	
Q4 Have you had specific educational success?				
Yes	23	22	45	0.106
	92.0%	100.0%	95.7%	
No	2	0	2	0.106
	8.0%	0.0%	4.3%	
Q5 Whether the elements of combat sports should be included in lessons of physical education?				
Yes	22	21	43	0.349
	88.0%	95.5%	91.5%	
No	3	1	4	0.349
	12.0%	4.5%	8.5%	

* statistical significance level of $\alpha = 0.05$

57%). In addition, size of the clubs does not differentiate this opinion relevantly. There is different aspect of perception the changes in the behaviour of children in training process, where the vast majority of respondents recognize the changes in behaviour (72%). Significant is the fact that size of the club significantly influences this phenomenon (Table 1).

Much more often seeing changes in children is declared by the sensei of large clubs (86%). Another relevant issue was the perception of significant differences in the training process between girls and boys: declarations on the „Yes” and „No” are characterized by similar percentage with a slight predominance of responses to „no” (51%). In large clubs dominated the lack of noting the differences between girls and boys (54%), while in the small clubs slight differences were noted (52%). More than 96% of all tested sensei declared, that the activities carried out by them have contributed significantly to obtain a specific educational success. Only two sensei from small clubs have not obtained any educational success (Table 1).

Parents or caregivers opinion

The results concluded that caregivers of girls pointed out most (approximately 33%) self-defence as an

element, which it is associated with the concept of martial arts. Among caregivers of male groups predominant response was that martial arts associate with individual development (46%). It is worth noting that the obtained results show a statistical significance ($p < 0.05$), and hence it can be concluded that the gender affects the perception of the concept of martial arts (Table 2).

The majority of parents or caregivers, regardless of the sex of child, declare positive influence of karate training on child behaviour (about 89% of all respondents). The vast majority of parents or caregivers state the ability to reconcile the duties of training at the level of very good (approx. 80%). The guardians of the female groups most often declared the opinion that karate elements should be in offer only for volunteers as extra activities (53%), while the parents or caregivers of males answered that karate should be part of PE lesson (49%) (Table 2).

Among boys the most important factor to attend karate training is forming of character (39%), while among the girls the physical development was the main reason of participation in karate training (37%) (Figure 1).

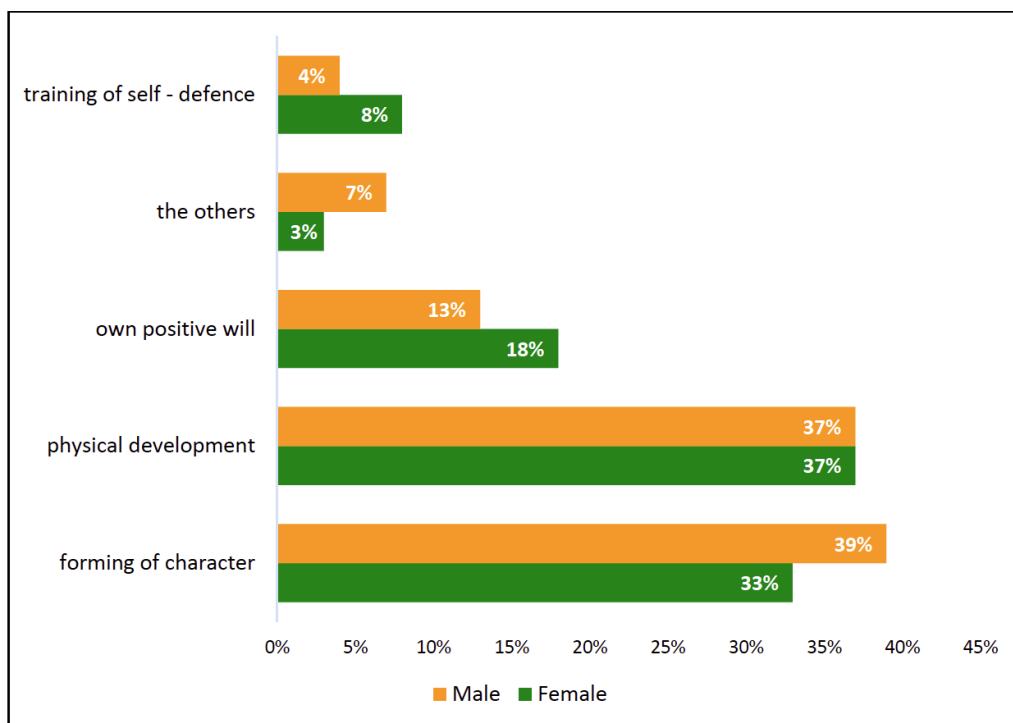


Figure 1. Determinants of participation in karate training ($p = 0.42$).

Table 2. Responses from the Questionnaire B (parents or caregivers of children n = 137).

Question	Female	Male	Σ	p
Q1 What is your associational concept of martial arts?				
Melee	5 8.33%	5 3.07%	10 4.5%	0.012*
Self-defence	21 35.00%	43 26.38%	64 28.7%	
Individual development	14 23.33%	75 46.01%	89 39.9%	
Physical skills' development	20 33.33%	40 24.54%	60 26.9%	
Q3 Whether training karate influences child's behaviour?				
Positive impact on the behaviour	51 85.00%	146 89.57%	197 88.3%	0.356
No changes in behaviour	9 15.00%	17 10.43%	26 11.7%	
Q4 What is the level of ability to reconcile duties and training?				
Very good	46 76.67%	133 81.60%	179 80.3%	0.159
Improvement within period of time	6 10.00%	16 9.82%	22 9.9%	
On average level	8 13.33%	10 6.13%	18 8.1%	
Improvement in systematic homework	0 0.00%	4 2.45%	4 1.8%	
Q5 If karate should be included in PE lesson?				
Yes	22 36.67%	80 49.08%	102 45.7%	0.057
No	0 0.00%	6 3.68%	6 2.7%	
In the form of self-defence	6 10.00%	14 8.59%	20 9.0%	
*For volunteers as extra activities	32 53.33%	63 38.65%	95 42.6%	

*statistical significance level of $\alpha = 0.05$

Among parents or caregivers of boys physical development was also an important reason for attendance in karate training. The least indicated reasons were family tradition, disability, and form of leisure time. All these answers are grouped in the category of the other, where the percentage of occurrence was not more than 7% for male and 3% for the female sex.

DISCUSSION

Karate is the art of self-defence without weapons, where the hands and feet are subjected to regular exercise, consisting in inflicting blows and kicks, as well as blocking elements. Karate is a system of exercises where people can master all the movements of the body, such as slopes, jumping, balancing, learning to move his limbs and body forward and back, side to side, up and down, in a uniform manner and free. Karate techniques are characterized by good control, that depend on the willpower of karate and are directed to the target with precision and spontaneity [24-26].

An important aspect of training karate is spiritual teaching karate – forming of the character, preserve the full dignity and humility, respect for etiquette and rules of the dojo. They are as important, as much as the technique [27, 28].

Karate training is an excellent source of youthful energy, sometimes maybe even a discharge of excessive aggression. Karate is characterized by symmetric development of both sides of the body, contributing to the harmonious development. In addition to sports games, karate is a discipline of shaping the highest level of coordination. Situations that change during the fight with the enemy require practicing the special skills, that will allow to respond quickly to changing conditions and rapid selection of appropriate techniques that lead to winning the fight. This ability requires hard and hard work on the training, that develops the same practitioner at high concentration and control over body and mind. Karate develops excellent agility and flexibility, expanding the range of motion in the joints, which positively affects the elasticity of the muscles and tendons in developing youth, strengthens muscles, thus contributing to the harmonious development of the body's health and aesthetic body. Practicing karate for children and young people affects the harmonious development of physical, motor and psychological aspects [29-31].

The role of the teacher in the creation of such

attitudes and improve the character of young people is extremely important [32, 33]. That pupils can achieve the full value of their people and strive for the development of the internal perfection, the teacher should be a role model and an example for their students. Lack of conviction pupil to his master, or lack of respect and knowledge of karate, can help to reverse the effects of education, shaping or exacerbating bad habits, personality development student. Karate is considered by many experts, as the best educational system in the world, the best technically and integrally developed [34]. It integrates in a planned and tested way of working on the psyche, emotions, intellect, and the state of human somatic.

Many social-psychological outcomes of practicing karate exist in the world, ranging from very positive to very negative. It is impossible to form more thoughtful and scientifically based statements. Taking into consideration younger students of karate, there has been many studies about the relationship between practicing karate and aggressive behaviour, from the positive effects, like self-regulation and self-esteem, to big violence level among students of karate. Training of karate, or wider speaking sports and martial arts are an excellent form of release youthful energy, maybe even a discharge of excessive aggression [7, 35, 36].

Regular attendance at training sessions and the dismantling of intense exercise create positive influence on the nature of the exerciser, develops willpower and perseverance in overcoming problems. Sometimes, more important is the role played by the instructor, which can create different styles of karate and other martial arts. The results of training karate can be very different depending on who is teaching [37]. Karate training develops a better mood, which stems from the conviction that state of health and physical fitness of the students increases. Self-esteem and self-confidence is growing, due to the difficulty occurred in training and great dedication in performing heavy exercise. After the training, karate minimizes the fears associated with the right of self-defence, after the improving techniques and meditation. People regularly practicing karate also gain invaluable skills that help maintain emotional balance, self-control, their emotions and behaviour in various situations, including stress and conflict. There is very big influence on the psyche of people, which train karate. These benefits flow from all styles of karate. There are four groups of exercises, that improve psyche: meditation exercises – developing concentration and ordering the

mind; intellectual exercise – raising the intellectual level and expanding the knowledge; self-suggestion exercise – developing self-discipline and mental abilities in the field of self-control; contemplation – perfecting personality traits.

As far as strength, endurance and technique can be successfully trained in the gym, the problem of shaping the psyche player is quite a serious issue. The process of shaping the athlete is a process that takes many years. Very important is kind of predisposition of the movement, and shape, that student, only from technical point of view, need at least 3-4 years of training to create. Participants selected martial arts training, because it was similar to their personal tendencies and those whose values and beliefs were not in tune with training karate, would most likely decide to stop training [38-43].

Experience, resistance to stress and other characteristics affecting the psyche, comes after many, many years. After trainings students become mentally strong, resistant to stress accompanying almost every day. Everything, in a matter of fact depends from the personality and background. Some units are learning and growing faster than the rest. Reasonable selection of exercises, even during normal warm-up is also a way, to observe the behaviour and development of psycho-physical aspects. Najafi [44], after his studies proved, that practitioners of martial arts emphasize more humility and report more overall levels of hope. Main outcomes of training karate are: improvement of character, development of spiritual strength, compliance with the rules of etiquette and refraining from impulsiveness. These principles teach a child mature proceedings. Karate is not just a martial art, it is also training himself. Launched in childhood, certainly have a positive impact on the development of the youth, regardless of whether they will choose traditional karate, or other types of karate.

Training karate is learning to control emotions. This martial art teaches the addition of patience and composure. It was noted that children practicing karate have better concentration and they easier acquire knowledge at school. In addition, this eastern martial art helps the child to properly develop motor coordination – the movements performed during training are extremely complicated to be done properly, the child must demonstrate focus and balance. Thanks to winning a seat belt in karate, students learn how to gradually achieve their goals. Karate training group also shapes in each one of them the sense of belonging and respect for the coach. Karate gives a sense of individuality, as each athlete has the right to show their full abilities and the ability to self-defence. Those who train karate are not afraid of the enemy – not bury their heads in the sand, just look him in the eye. They can also protect against anyone. At this stage of learning and development is not self-defence and fighting, but the most important in this sport are the formation of character, affective self-regulation, pro social behaviour and improvement of the body [45].

CONCLUSIONS

The participation of children in karate training has a positive effect on their behaviour, regardless of gender. Positive exposure on behaviour of karate training groups is more clearly visible in large clubs (more than 200 members). The most common reasons for taking karate training is to develop character and positive impact of physical activity on training groups' development therefore karate like other martial arts should be recommended as optimal form of health-related training for children and youth.

COMPETING INTERESTS

The authors declare that they have no competing interests.

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