

Analysis of karate training for people with mental disabilities

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- ✍ A Study Design
- 📁 B Data Collection
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Abstract

Background & Study Aim:

Regular physical activity by mentally disabled people can contribute to their better functioning in society. Karate training through its comprehensive psychomotor emphasis can complement rehabilitation and therapeutic activities. Therefore, the cognitive aim was to knowledge of the effects of karate training for people with mental disabilities in order to develop a universal pattern of activities for them.

Material & Methods:

A two-week covert observation of karate classes was conducted on 4 mentally disabled 19-year-olds: 2 from kyokushin karate (a woman with Down syndrome and a man with Asperger syndrome) and 2 from shotokan karate (a man with Down syndrome and a man with Asperger syndrome).

Results:

Three universal karate class schemes have been developed – for people with Down syndrome, with Asperger syndrome, and inclusive classes for able bodied people and mentally disabled people. The proposed schemes maximize the training effects of the mentally disabled and fully fit into the karate culture.

Conclusions:

It is recommended to conduct karate classes for mentally disabled people based on the developed schemes. The presented schemes of karate classes are characterized by high effectiveness.

Keywords:

Asperger's syndrome • Down syndrome • martial arts • innovative agonology • karate culture,

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Karate – a fighting method developed in Okinawa that can be trained as a martial art (the aim is self-improvement and health maintenance), a combat sport (the aim is sports competition), or a fighting system (the aim is self-defence skills) [41].

Mental disorder – a condition in which the affected person experiences internal mental and emotional states and presents behaviours that clearly deviate from the norm, and on top of that are negative and aimless [42].

Mental illness – a disease within the brain that leads to changes that are often irreversible or difficult to treat [42].

Kata – prescribed patterns or sequences of techniques [43].

Kumite – is a semi-contact karate competitive concurrence, where two athletes perform various kicking, punching and blocking techniques towards each other with maximum control in order to gain points and win the match. Destruction is fictive.

Kyu – *noun* a level of proficiency in some martial arts [44].

INTRODUCTION

In our society there are people who are ‘incomplete’ in a way. This is due to their physicality [1], which places a mass of limitations on them and requires adjustments. The way they communicate with those around them is also a barrier. These people are often perceived as infirm or defective [2]. Disability encompasses various functional limitations of human individuals in any society. It results from the impairment of the ability to perform a certain activity in a way that the society considers ‘normal,’ typical of human life. Limitations can take on a permanent or temporary character, they can be total or partial. They can include sensory, physical, mental or complex (more than one disability) sphere of a person’s life [3].

Disability should be viewed from two perspectives: medical and social. The medical way of looking at a disability can describe the difficulties of everyday life caused by the medical conditions of the people in question. The social aspect, on the other hand, describes what disabled people face every day due to the maladaptive environment in which they live and the lack of understanding from the people around them [4]. Mentally disabled people have the hardest time adapting to their environment [5].

A way to raise the standard of living of people with mental disabilities is their physical activity, especially taking into account the methods and means of innovative agonology [6, 7]. It can be an important element in overcoming limitations and contribute to their social functioning. Therefore, it has been found that karate, through comprehensive psychomotor training, can serve as a complement to rehabilitation and therapeutic activities [8]. Karate is about overcoming one’s own weaknesses, in accordance with the accepted values of karate culture [9].

Development of the karateka occurs through the acquisition and improvement of physical [10] and mental [11] skills. Therefore, physical and mental training should be treated with the same amount of consideration at every stage of karate practice [12]. In addition, the practice of karate brings liveliness, excitement and joy in every form of training: martial art [13], combat sport [14], self-defence system [15]. But for people with disabilities, the emphasis is definitely on the martial art form [16]. The practice of karate relieves negative emotional states, brings well-being, and enhances

self-esteem and formulates social habits consistent with the Budo philosophy [17]. In view of the above, it was assumed that it is possible to develop a training regimen for people with mental disabilities, regardless of the types of traditional [18], sports [19], and contact [20] karate.

Therefore, the cognitive purpose was to knowledge of the effects of karate training for people with mental disabilities in order to develop a universal pattern of activities for them.

MATERIAL AND METHODS

The subjects of the study were 4 people: one woman with Down syndrome and one man with Asperger’s syndrome training kyokushin karate at the Kalisz Shinkyokushin Karate Club; and one man with Down syndrome and one man with Asperger’s syndrome training shotokan karate at Paweł Piepiora’s Shotokan Dojo [21]. Covert observation of karate classes over a two-week period was used as the method. The subjects analysed were 19 years old and held grades of 7 kyu. The purpose of the covert observation was the effectiveness of karate training and acquired social skills through a psychomotor prism. Based on this, a pattern of classes for people with Down syndrome, Asperger’s syndrome and integration classes of healthy and mentally disabled people was created.

RESULTS

The proposed schemes of karate classes refer to a unit of 60 minutes, where the introductory part (warm-up) lasts for 15 minutes, the main part of (the body of the class) lasts 30 minutes and the final part – psychophysiological calming of the body – also lasts for 15 minutes (Table 1 to 3).

DISCUSSION

The proposed karate class patterns are based on observed training effects and developed social skills about karate culture [22]. Practitioners with mental disabilities become more confident in their knowledge and emotionally poised [23] as they gain experience [24]. This projects into their psychosocial skills and communication with the environment [25]. The trainer teaches them

Table 1. Karate class schedule for people with Down syndrome.

Stage of class	Tasks	Notes
Initial	<ol style="list-style-type: none"> 1. Warm-up on the spot: preparing the body for training through circulations, swings, bends, lunges, lunges, and limbering exercises. 2. Warm-up on the move: play and running movement forms like 'tag' game. 3. Warm-up to introduce the topic of the class: kihon exercises, first single techniques, then combinations on the spot and in motion. 	Coordination exercises can be difficult for exercisers.
Main	<ol style="list-style-type: none"> 1. Practice of a given kata. Dividing a given system into movement sequences and gradually mastering them. Then combining the practiced sequences into a whole system. 1. Elementary kumite exercises with a partner. 2. Practicing hand and foot techniques using equipment. 	Practitioners may find it difficult to combine kata sequences.
End	<ol style="list-style-type: none"> 1. Relaxation exercises in place with accent on breathing. 2. Exercises accenting the sensing of neuromuscular tensions. 3. Recitation of Dojo Kun. 	It is important to summarize the classes and have a positive attitude towards karate.

Table 2. Karate class schedule for people with Asperger's syndrome.

Stage of class	Tasks	Notes
Initial	<ol style="list-style-type: none"> 1. Warm-up on the spot: preparing the body for training through circulations, swings, bends, lunges, lunges and flexibility exercises. 2. Warm-up on the move: speed-oriented games. 3. Warm-up to introduce the subject of the class: kihon exercises appropriate to your rank. 	Strictly adhere to the established direction of the warm-up in place: top to bottom or bottom to top.
Main	<ol style="list-style-type: none"> 1. Practice of hand and foot techniques with equipment. 2. Practice of task kumite with a partner. 3. Practice of a given kata using the add-on method. After mastering the initial sequence of movements, another sequence is added and repeated from the beginning. 	Monotony should be avoided and the exerciser should be constantly stimulated by task situations.
End	<ol style="list-style-type: none"> 1. Exercises focusing on the feeling of neuromuscular tensions. 2. Meditation with accent on breathing. 3. Recitation of Dojo Kun. 	It is important to summarize the classes and have a positive attitude towards karate.

Table 3. Scheme of inclusive karate classes of healthy and mentally disabled people.

Part of the activity	Tasks	Notes
Initial	<ol style="list-style-type: none"> 1. Warm-up on the move: games and movement games. 2. Warm-up in place: general development exercises in pairs: able-bodied and disabled. 3. Warm-up introducing the subject of the class: kihon exercises appropriate to the degree held. 	The spacing of the group of exercisers must be alternating: able-bodied – disabled.
Main	<ol style="list-style-type: none"> 1. Practice of task kumite in pairs: able-bodied – disabled. 2. Practice of a given kata with division into teams of three: 2 able-bodied and 1 disabled; 2 disabled advanced ranks and 1 able-bodied lower ranks. 	The spacing of the group of exercisers must alternate: able-bodied – disabled.
End	<ol style="list-style-type: none"> 1. Exercises focusing on the feeling of neuromuscular tensions. 2. Meditation with breathing accent. 3. Recitation of Dojo Kun. 	It is important to summarize the classes and have a positive attitude towards karate.

how to function in everyday life, where they must be able to take care of themselves and be highly independent [26]. And the karate culture teaches them how to distinguish between right and wrong and not to be tricked or taken advantage of, so as not to become victims of someone else's behaviour [27]. The role of *kata* in spatial orientation [28] and the differentiation of neuromuscular tension in *kumite* [29] should

be emphasized here. The whole is tied together by the philosophy and etiquette that shapes the mentality of the practitioners [30]. It is important that people with mental disabilities are karatekas and identify fully with the dojo [31]. It is also important that regardless of style, gender, disability, karate is attractive to everyone, and the proposed methodology relates fully to physical culture sciences [32].

At this point, it should be noted that the results of the study presented here are of a pilot nature. It would be necessary to continue them with people with other mental disabilities and disorders. This will help develop a new martial arts methodology for people with mental disabilities [33]. Physical culture is an asset that must be universally accessible and give pleasure in belonging to its areas. Therefore, the dissemination of karate sports competition for people with disabilities is justified [34]. This also counteracts the phenomenon of social exclusion of people with disabilities. In the competition itself, there is no division by sport level [35] and ranking [36]. The division of *kata* and *kumite* competition into categories is delineated by the disability in question. And with regard to the cases analysed, athletes with Down syndrome will be in a category separate from athletes with Asperger syndrome.

Such a perspective gives equal opportunities to people with disabilities. Therefore, methodology for training people with disabilities according to their dysfunctions is very important [37]. There is the issue of large possible applications of innovative therapeutic and prophylactic proposals based on the tradition of combat sports and martial arts [38, 6, 7, 39, 8, 40].

CONCLUSIONS

The developed schemes of karate activities for people with mental disabilities are prepared universally for the given dysfunctions. The base parts can be expanded, but based on the developed schemes, because the activities included in them are characterized by high efficiency.

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