

Taekwondo training in the context of dealing with negative emotions

Dorota Ortenburger^{1ABCDE}, Jacek Wąsik^{1ACDE}, Alena Bukova^{2ADE}

¹Institute of Physical Education, Tourism and Physiotherapy, Jan Długosz University in Częstochowa, Częstochowa, Poland

²Institute of Physical Education and Sport, Pavol Jozef Šafárik University in Košice, Košice, Slovakia

Authors' Contribution:

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

Source of support: Departmental sources

Received: 13 March 2015; **Accepted:** 29 May 2015; **Published online:** 22 December 2015

AoBID: 10962

Abstract

Background & Study Aim:

Effective dealing with intense negative emotions such as anger, frustration and irritation has an adaptive meaning. Being angry is not considered a substantial problem, what matters is how people deal with it. In the light of related literature, one of the psychologically most beneficial aspects of martial arts training is the increase in the ability to cope well with negative emotional pressure. The aim of this study is answering the questions: how taekwondo practitioners deal with negative emotions? Do the temporary variables (the frequency of trainings and age) and the quality variables (e.g. participation in taekwondo camps) differentiate the group with respect to dealing with these feelings?

Material & Methods:

The research group was composed of 47 individuals who practice taekwondo (average 25.17 ±9.73 years). The research investigated a group of emotions considered to have stressful character (such as anger) and cope well with negative emotional pressure. We applied research measures of health psychology. Questionnaires used in psychology and health promotion as well as an independently developed survey were applied (Anger Scale, Emotional Control Scale). The obtained results were subject to statistic analysis: cluster analysis with the use of k-means clustering was carried out.

Results:

Increased frequency of trainings (related to martial arts taekwondo camp), is connected with mitigated anger expression, increased the ability to control oneself, restraining negative emotional reactions.

Conclusions:

In summary, we can say that effective dealing with fear, constructive dealing with frustration, anxiety of failure, dealing with disappointment and unpleasant surprises represent some of the many benefits arising from the effort devoted to practicing taekwondo.

Key words:

anger, anxiety, coping well with pressure, dealing with negative emotions, martial arts

Author's address:

Jacek Wąsik, Institute of Physical Education, Tourism and Physiotherapy, Jan Długosz University of Częstochowa, Armii Krajowej 13/15, 42-200 Częstochowa, Poland; email: jwasik@konto.pl

Taekwondo – a Korean martial art and combat sport where it uses kicks and punches with a heavy emphasis on kicks. The fights are individual and standing.

TKD – abbreviated name
taekwondo

INTRODUCTION

Effective dealing with intensive negative emotions like anger, frustration and irritation has an adaptive meaning. The psychological sphere, including the *emotional sphere* is very important, as is revealed in the subject literature, together with commonsense observation of everyday life. Anger, sadness, anxiety and the ability to make use of emotional information represent an important part of being a human. What is vital here are the proportions and intensity, as well as the ability of continuing one's way despite difficulties, without giving up. It is a natural response to being frustrated or attacked. Since anger can be powerful, managing it is challenging. Feelings of anger can at occasions turn into rage and lead to destructive and violent behaviour. It takes plenty of self-awareness and self-control to manage angry feelings. Sometimes these skills take a lot of time to develop. Feeling angry is not a substantial problem though; the problem lies in how people deal with it.

In the light of literature, one of the psychologically most beneficial aspects of martial arts training is the increased ability to cope well under emotional pressure, and it may improve one's mood. Confidence allows to remain calm during difficult stressful situations [1-3]. There are data revealing that effective dealing with negative emotions including anxiety, frustration, irritation and anger has an adaptive meaning, as the dominance of these feelings is connected with a long-lasting stimulation of the sympathetic system. According to many researchers, experiencing severe anger and fury is a skew in one's perception causing exaggeration of the negative qualities of things. What is more, anxiety is multidimensional, consisting of physical and mental components. Physical or somatic anxiety encompasses perception of the physiological symptoms of arousal, such as heart rate, sweat response or breathing rate. Cognitive anxiety refers to the worries, qualms or negative expectations about competition [4]. Anger disturbs the activity of frontal lobes, hinders communication with prefrontal brain – not only does a person lose the ability of being rational, but he/she also loses awareness that his/her behaviour is irrational [5].

On the other hand, in fact, anger and sadness are important elements of life, and recent research shows that experiencing and accepting such emotions are vital to our mental health. Learning how to cope with those emotions is the key. It is how we deal with stressful situations and negative emotions that makes the difference. Substantial amount of information can be found in publications devoted to health psychology

that appeared in Polish as well as other languages [6,7]. Martial arts trainings carried out competently elicit positive changes [8]. Such changes will appear only under the conduct of a competent instructor, a real master. Unfortunately, media cause to prevail the caricature and pathology of martial arts [9]

The aim of this study is answering the questions: how taekwondo practitioners deal with negative emotions? Do the temporary variables (the frequency of trainings and age) and the quality variables (e.g. participation in taekwondo camps) differentiate the group with respect to dealing with these feelings?

MATERIAL AND METHODS

Participants

The group was composed of 47 individuals who practice taekwondo (average age 25.17 ±9.73 years; range: 16-45 years). This study was approved by Local Ethical Committee and was performed in accordance with the international ethical standards.

Protocol

Questionnaires used in psychology and health promotion, and independently developed survey were applied (Anger Scale, Emotional Control Scale). The questionnaires within health psychology are also aimed at helping to identify the risk factors included in behaviour, habits and the way of reacting to challenges of everyday life [6, 10].

Statistical analysis

The results were compiled with use of the basic statistical methods, describing: the mean and standard deviation. Due to the fact that the obtained data are of self-descriptive character, the analysis was performed applying methods recommended for proceeding "non-acute", imprecise data frequently appearing in the health science. Explorative techniques that aim at identifying subgroups within multidimensional data collection were applied. Among others, cluster analysis with the use of k-means clustering was carried out. Authors identifies the dependencies between coping well with negative emotional pressure, the *frequency* of participating in TKD trainings and age (a number of emotions considered to have negative character, such as fear, anger, anxiety, and increased externalized and internalized anger).

RESULTS

Data concerning expression of the anger experienced, i.e. targeting anger – to inside and outside

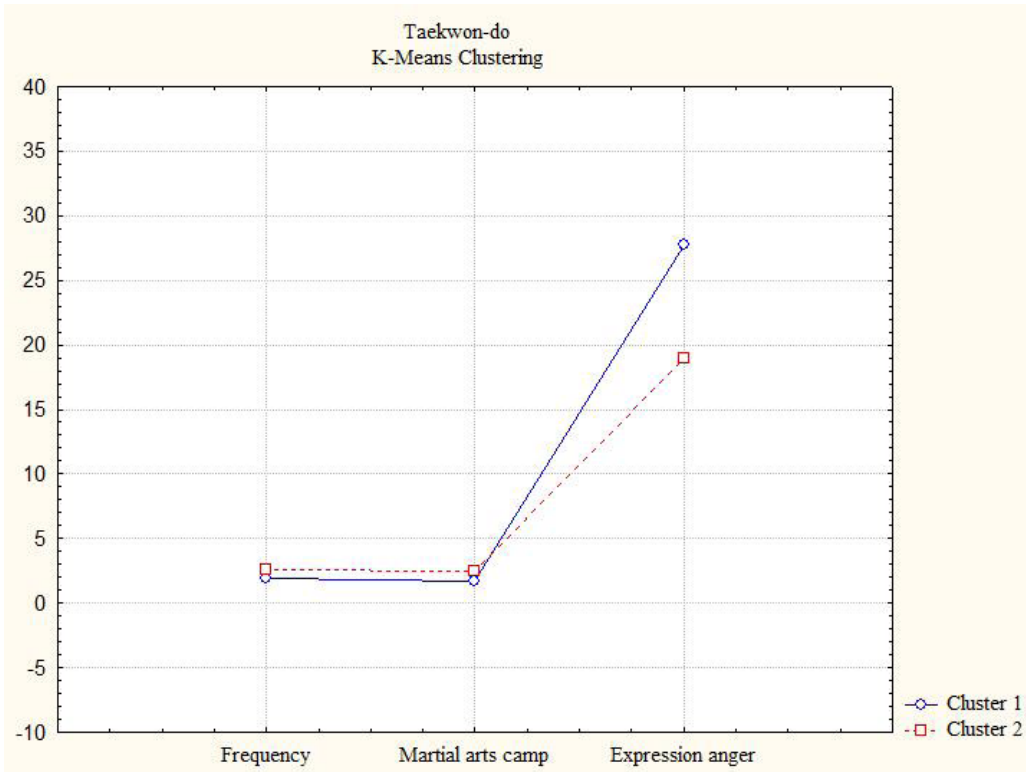


Figure 1. The result of cluster analysis using k-means clustering (frequency of training, martial arts camp, expression of anger) taekwondo sample group (n = 47) (p<0.05).

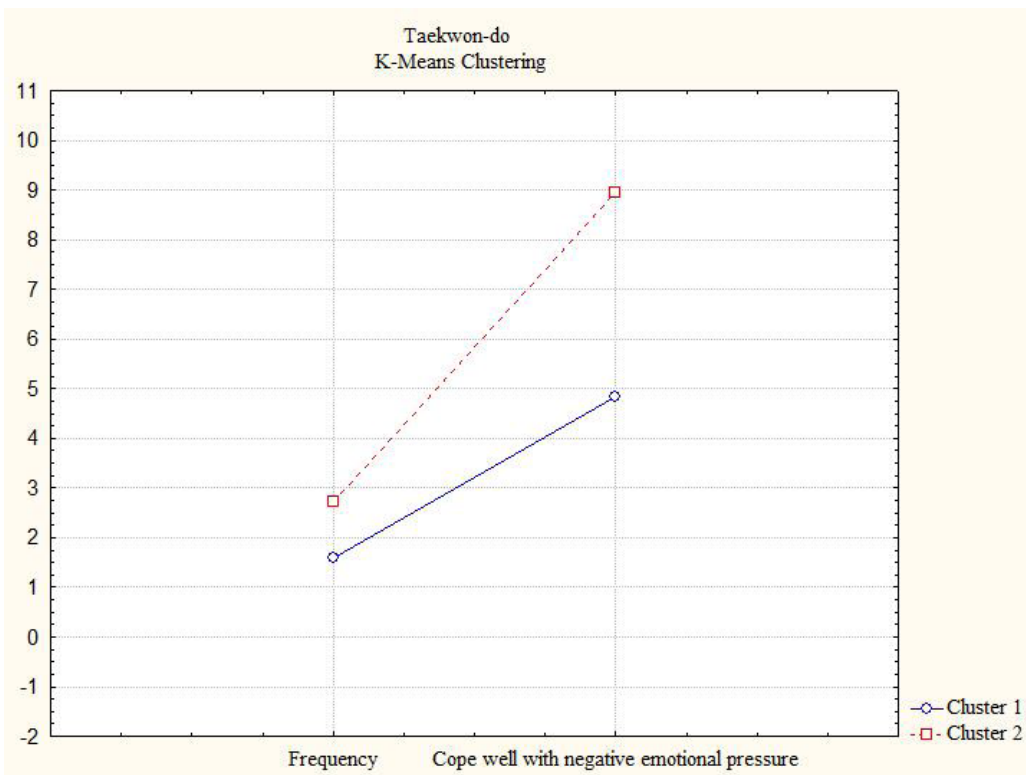


Figure 2. The result of cluster analysis with the use of k-means clustering (cope well with negative emotional pressure and frequency of training) taekwondo sample group (n = 47) (p<0.05).

(suppressing/extinguishing and revealing anger) were obtained. The information refers to general situations and reactions that are usually revealed, typical for a particular person. In the sample group, clusters were identified on the basis of levels of relevancy (Figures 1 and 2).

Increased frequency of trainings (related to martial arts camp) was associated with mitigated anger expression, and it increased the ability of controlling oneself, restraining negative emotional reactions (Table 1). Increased frequency of trainings substantially improved the ability to cope well with negative emotional pressure (Table 2).

DISCUSSION

Based on the presented data, we can say that over 80 percent of TKD practitioners support the belief that taekwondo is meant to help you understand and control anger. To illustrate our findings, revealing that TDK contributes to the mission “martial arts sport for mental health”, here is a representative response in the form of quotation by one of the respondents: „I have noticed that since I became involved in trainings, the time span from getting angry to being overwhelmed by anger has become considerably longer. Taekwondo gives me more time to cool down and act in such a way that I would not regret it later”.

According to Dawid Burns [10], a psychologist who specializes in anger management, some people are more “hot head” than others; they get angry more easily and more intensely than the average person does.

The results obtained with the use of „Emotions Control Scale” showed that those who train more systematically are able to deal with anxiety in difficult life situations, such as the pressure of expectations, duties piling or tension between peers much better than others (Table 2). Our observation is in line with the related literature [8]. Such results are presented, among others, by the authors of health psychology, social psychology and other associated fields [7, 11]. It is not only the length specified by the number of years that has significance here (including age), but also frequency, regularity and engagement in additional forms of participation, such as TKD camps (Figure 1).

One can find support for this result in the theories of educational psychology. Taekwondo practitioners during camps stay with a group they share interests with, have possibilities of spending time in a stimulating environment, where their passion and their emotional needs, such as the need of belonging to a group, are met. Positive experience connected with belonging to a group where one’s emotional needs are

Table 1. Analysis of variance – minimizing variance inside clusters, maximizing between clusters (frequency of training, martial arts camp, expression of anger) taekwondo sample group (n = 47) (p<0.05).

Explanatory variable	Cluster 1		Cluster 2		Variance between clusters	Variance from within, inside cluster	F	p
	Mean	SD	Mean	SD				
Frequency of training	1.95	0.76	2.59	0.97	4.74	35.47	6.02	0.02
Martial arts (TDK) camp	1.65	0.59	2.52	1.05	8.66	35.29	11.05	0.00
Expression angry	27.75	3.63	18.96	2.56	887.12	420.71	94.88	0.00

Table 2. Analysis of variance – minimizing variance inside clusters, maximizing between clusters (cope well with negative emotional pressure and frequency of training) taekwondo sample group n = 47 (p<0.05).

Explanatory variable	Cluster 1		Cluster 2		Variance between clusters	Variance from within, inside cluster	F	p
	Mean	SD	Mean	SD				
Frequency of training	1.58	0.61	2.73	0.82	14.22	25.98	24.64	0.00
Cope well with negative emotional pressure	4.82	1.55	8.93	1.01	183.29	68.34	120.69	0.00

met facilitate building self-confidence that allows for better dealing with negative emotions. Some types of emotional experience, although the majority of them are positive, are also negative, connected with inevitable disappointment as a result of lost fights, for illustration [7, 12]. The fact of experiencing temporary negative emotions is not a thing that cannot be confronted, and pathological [10].

Most studies on the long-term effects of martial arts training agree that martial arts are efficient in producing positive social and psychological changes. Effective dealing with anger, frustration and irritation has an adaptive meaning. In the light of scientific literature, training develops human predisposition for overcoming fear and anxiety which generate aggression towards other people. It is, in spite of its appearance, a way to non-aggression [9].

Results shows that not only TKD improves psychological well-being. Descriptive studies of beginner, intermediate and advanced Karate trainees found, applying the Buss-Durkee Hostility Inventory, that although the group as a whole were characterized by preference for indirect expression of hostility and anxiety, hostility measures were lower amongst the more advanced practitioners, suggesting that a beneficial trend occurred following extended training [13]. There is usually inverse relationship between the amount of time spent practicing and the level of their aggression, hostility and anxiety [3, 8]. Competently carried out martial arts training has a positive effect on the man in a variety of dimensions of life – health, motor, mental, intellectual, ethical, ecological, social etc. [7]. Such changes can be performed only by a competent teacher, a real master [8,9]. Psychologically, taekwondo may further improve one's mood [1,2].

That being the case, it is incomprehensible that martial arts have been largely neglected as a focus of psychological research or psychotherapeutic inspiration. The main reason for this neglect may be the negative public image of martial arts [9, 11]. Unfortunately, mainly thanks to electronic media, the mastery of martial arts teacher is associated with the motor efficiency, with the excellent coordination, but not with the knowledge, methodological and scientific qualifications, i.e. with his wisdom [9].

Taekwondo not only improves practitioners' physical health, but it also supports their psychological well-being. One result of the belief that sport can maintain

moral growth is the development of programmes designed to build life skills such as self-management, coping skills, dealing with anger, controlling impulsiveness. The obtained results referring to the level of coping with stress may be insufficient for them to be applied optimally in sports and in other areas. Being aware of one's own negative emotions is treated as one of the key elements of mental preparation [4]. Evidence has suggested that taekwondo training may decrease anxiety in adults, improve self-regulation and induce positive mood state changes in college-aged students; on the other hand, negative emotions can dampen enthusiasm for life [1, 2].

CONCLUSIONS

In summary, we can conclude that abilities such as effective dealing with fear, constructive dealing with frustration, anxiety of failure, dealing with disappointment and unpleasant surprises make up some of the many mental benefits that one's effort devoted to practicing taekwondo brings along. Self-control, self-assurance and the ability of maintaining the balance between manifesting and controlling anger are enhanced. Increased frequency of trainings (involving longer training status/ longer practice) is connected with increased ability of controlling oneself, or restraining negative reactions. However, it is impossible to avoid negative emotions completely, since living means also experiencing setbacks and facing conflicts. It is a complex process and often we do not have the skills to deal with some of the negative feelings. That is why we find it hard to cope when we experience them.

Burns [10] states that learning how to cope with those emotions is the key, and he adds that suppressing thoughts and feelings can be even harmful. Feelings, both positive and negative, allow us to understand other people and how we react to them. Overall, studies have verified that proper martial arts practice can bring about positive physical and psychological changes. Taekwondo training lowers the level of stress chemicals and allows us to cope better with negative emotions, as well as it improves women's self-concept [1]. In addition to improving the practitioners' physical health, it enhances their psychological well-being and dealing with negative feelings [11, 14].

COMPETING INTERESTS

Authors declare no conflicts of interest.

REFERENCES

1. Finkenber ME. Effect of participation in Taekwondo on college women's self-concept. *Perc Mot Skills* 1990;71(3): 891–894
2. Kurian M, Caterino LC, Kulhavy RW. Personality characteristics and duration of ATA Taekwondo training. *Perc Mot Skills* 1993; 76(2): 363–366
3. Toskovic NN. Alterations in selected measures of mood with a single bout of dynamic Taekwondo exercise in college-age students. *Perc Mot Skills* 2001; 92(3 Pt 2): 1031-1038
4. Tod D. *Sport Psychology: The Basics*. London: Routledge; 2014
5. NewBerg A, Weldman M. *How God Changes Your Brain: Breakthrough Findings from a Leading Neuroscientist*. New York: Ballantine Books; 2009
6. Juczyński Z. *Narzędzia pomiaru w promocji i psychologii zdrowia*. Warszawa: Pracownia Testów Psychologicznych; 2009 [in Polish]
7. Fong SM, Shamay NG. *Korean Martial Arts and Health – Taekwondo*: In: *Martial Arts for Health: Translating Research into Practice*. Foster City: OMICS Group eBooks; 2014
8. Barczyński B, Graczyński M, Kalina RM. Budo – a unique keyword of life science. *Arch Budo* 2009; (5): 116–119
9. Kalina RM, Barczyński BJ. Long way to the Czestochowa Declarations 2015: HMA against MMA. In: Kalina RM (ed.) *Proceedings of the 1st World Congress on Health and Martial Arts in Interdisciplinary Approach*, HMA 2015, 17–19 September 2015, Czestochowa, Poland. Warsaw: Archives of Budo; 2015: 1-11
10. Burns DD. *Feeling good: The new mood therapy*. New York: HarperCollins Publishers; 2009
11. Fuller J. Martial arts and psychological health. *Psychology and Psychotherapy. British Journal of Medical Psychology* 2011; 61(4): 317–328
12. Williams JM, Krane V. *Applied sport psychology: Personal growth to peak performance*. Columbus: McGraw-Hill Education; 1986
13. Rothpearl A. Personality traits in martial artists: A descriptive approach. *Perc Mot Skills* 1980; 50(2): 395–401
14. Wąsik J, Grygiel L. *Taekwon-do: Basics of traditional training*. Czestochowa: Projack; 2012

Cite this article as: Ortenburger D, Wąsik J, Bukova A. Taekwondo training in the context of dealing with negative emotions. *Arch Budo Sci Martial Art Extreme Sport* 2015; 11: 99-104