The temperament of karate competitors versus the systems of kumite sports fight

Pawel Piepiora¹(A,B,C,D,E), Jan Supiński²(B), Kazimierz Witkowski¹(C,D,E)

¹ University School of Physical Education in Wrocław, Faculty of Sport Sciences, Department of Sport Teaching, Division of Individual Sports
² University School of Physical Education in Wrocław, Faculty of Physical Education, Department of Humanities and Health Promotion, Division of Psychology

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Summary

Introduction. The aim of the research was checking whether karatekas who prefer different kumite competition forms differ from each other in terms of temperament.

Material and methods. In order to conduct the research Temperament Measurement Questionnaire KT-134 and Social Approval Questionnaire (SAQ) have been used. Each sample deliberately consisted of competitors who represent different kumite sports fight systems (semi-contact, knockdown, full contact, mix fighting), orienteering runners and students of University School of Physical Education in Wrocław.

Results. Karatekas competing in other formulas of sports fight differ from each other in temperament scales and they don’t distinguish themselves (Oyama karate) with superlative indexes of temperament in comparison with non-contact discipline sportspersons (orienteering runners) and University School of Physical Education in Wrocław students.

Conclusion. Karatekas who prefer different forms of kumite competitions differ from each other in terms of temperament. The results confirm the hypothesis of sport’s influence on persons who practice karate.

Introduction

Currently karate is one of the most popular martial arts in the world. Karate has been evolving for many years from plebeian form of self-defence into budo martial art and then into sports disciplines. Different views of masters concerning the development of karate in the world contributed to the division of styles of this martial art. Organizations promoting various forms of karate were created.

In karate there are two competitions – kata and kumite. Kata consists in the so-called formal exercises that are sets consisting of fragments of a fight without competitors according to a predefined scheme. On the other hand, kumite is a sports fight according to specified rules. All karate styles are characterised by distinct kumite rules. This fact is caused by a different philosophy of masters of various styles concerning the fight and sporty settlement of contest. For the sake of kumite fighting rules developed by various karate styles or organizing these styles, there can be distinguished four kumite systems: semi contact, knockdown, full contact and mix fighting. From the system of rules that is least close to non-sport fight to a formula that is most similar to a non-sport clash.

The temperament of sportspeople is the subject of researches because of a belief that it can constitute a factor of natural and possibly sport results selection. According to J. Strelau a temperament denotes „relatively constant traits of an organism that are originally biologically determined manifesting themselves in formal traits of behaviour, that is in its energetic level and in a characteristic of time reaction” [1]. “In the common meaning temperament is defined as a man’s disposition e.g. he/she is characterised as lively, hot-blooded, mild, sometimes it is also said that somebody has a calm (phlegmatic) or weak temperament” [2].

All psychological elements of karate, the transmission of bushido knowledge and upbringing in the spirit of budo, attitudes and values, but also etiquette and symbols adopted by karate adepts form some kind of culture – karate culture. Karate culture gives a possibility to present a psychological profile of persons who practice karate. The values and ideals of karate culture should shape the mind of people practicing karate regardless of training aims – self-improvement, sports competition, self-defence or recreation. Namely, karatekas-sportspersons (kumite competitors) and other adepts of „empty hand” art as people of karate culture should stand out with superlative temperament indexes in comparison with other sportspersons and population. The intent of this research is the evaluation if this is really the case. Having accepted an assumption about a full, regulatory influence of the values of karate culture on the sphere of psychical functioning of competitors, they should be characterized by an
exceptional" temperament (measured in KT-134 categories): very good balance and mobility of nervous processes. However, the present-day karatekas are basically active sportspersons and it cannot be ruled out that their mind and behaviour are more influenced by requirements and values specific to sports competition than by „pure” ideals of karate culture. If sport is a regulator of interdependence between kumite systems with its ethical, aesthetic, socio-political and anthropological qualities, then karatekas should be characterised by different temperament indexes that are dependent on the system of kumite sports fight.

In connection with a research specified in such a way, the following hypothesis has been taken for verification: karatekas who prefer different forms of kumite competition differ from each other in terms of temperament. Generally: on a strictly empirical level the aim of the research was to get the answer to a question whether temperament profiles of present-day karatekas will turn out to be more similar to hypothetical profiles deduced from the hypothesis of being subjected to the values of karate culture or the profiles deduced from the hypothesis of being subjected to the requirements of sports competition.

Material and methods

In order to carry out the research the Temperament Measurement Questionnaire KT-134 [3] and Social Approval Questionnaire (SAQ) have been used to verify the accuracy of respondents [4]. The research analysis was carried out with the use of the set of statistical methods „Statistica 10” using the analysis of variances as a primary method. Additionally a one-group significance T test and post-hoc tests have been used.

From many karate styles practiced in Poland four the most developed and known karate styles in our country representing different kumite sports fight systems have been chosen on purpose. From the most restricting contact style (semi-contact) through contact systems (knockdown, full contact) to the system with minimal restriction of fight rules (mix fighting). These styles include: shotokan (semi-contact), kyokushin (knockdown), Oyama (full contact), shidokan (mix fighting).

To every sample were taken thirty seniors – men aged from 18 to 39. The competitors are on a master level: Players championship, 1-5 dan, competition-ranging experience in 4-25 years. Among them are present and former members of seniors’ national team of a given style. Additionally, the obtained results have been compared with the results of orienteering runners competitors (national team: 30 men aged 18-39, competition-ranging experience in 4-25 years) as representatives of non-contact sports discipline and with the average results of physical education students of University School of Physical Education in Wroclaw. The reference sample of students amounts to 2920 men aged 18-39 tested in years 1980-2009.

Results

Correlations between the obtained KT-134 results and SAQ are not relevant. The data does not depend on SAQ and is not subject to social approval.

The results of the analysis of variables of KT-134 temperament scales: agitation, suppression and mobility in the given samples are presented in the figure 1 below.

### Agitation

Shotokan adepts demonstrated significantly greater agitation than the representatives of Oyama karate (p<0,037).

![Fig. 1. The collection of results in KT-134 temperament scales: agitation, suppression and mobility](image)
Kyokushin competitors (p<0,018) and Oyama karate (p<0,0003) were characterised by significantly lower agitation than shidokan competitors (p<0,018). Focusing on the comparison of karatekas with orienteering runners, shotokan (p<0,0002), kyokushin (p<0,004) and shidokan (p<0,000001) competitors demonstrated significantly higher level of agitation than orienteering runners. The similar results haven’t been discovered with adepts of Oyama karate. Considering the sportspersons and the average results of the population of University School of Physical Education in Wrocław students also shotokan (p<0,00003), kyokushin (p<0,010) and shidokan (p<0,000001) competitors manifested significantly greater agitation than the average population of University School of Physical Education in Wrocław students. Other results were of small statistical value.

Suppression

Shotokan karate adepts demonstrated relevantly higher level of suppression than kyokushin style karatekas (p<0,024), orienteering runners (p<0,008) and the average population of University School of Physical Education in Wrocław students (p<0,008). On the other hand, shidokan karate competitors demonstrated significantly greater suppression than kyokushin style karatekas (p<0,00008), Oyama style (p<0,0004), orienteering runners (p<0,00001) and the average population of University School of Physical Education students (p<0,000001).

Mobility

Shidokan competitors demonstrated significantly greater mobility than the masters of kyokushin style (p<0,027), Oyama style (p<0,003), the average population of University School of Physical Education in Wrocław students (p<0,000009) and orienteering runners (p<0,00004). Apart from that shotokan karatekas (p<0,026) and marginally kyokushin karatekas (p<0,05) demonstrated significantly greater mobility than orienteering runners.

The results of the analysis of temperament balance scale KT-134 are presented below in Figure 2.

Discussion

Temperament traits can determine the preferences for a sports discipline, because people who differ in terms of temperament display different degree of a need for stimulation, varied degree of stamina, stress resistance and their acquisition of movement habits is also different. If karate culture had an influence on kumite competitors, then the obtained data of karatekas in temperament scales should have been similar. No matter what style and no matter what kumite system karate adepts are fighting, they should be balanced with respect to the processes of agitation and suppression and they should be characterized by very good level of mobility. The obtained results present karate competitors as sportspersons who depend on kumite systems – type of fight – sports discipline. The results of existing researches [5, 6, 7, 8] point to the possibility that there are differences in temperament traits depending on sports discipline that is practiced. That is why
temperament traits constitute a vital selective factor both at the stage of sport recruitment and during its practice. All these traits are interconnected and determine a degree of a need for stimulation. Among persons practicing sport a sexual dimorphism in terms of temperament traits is significantly lower [9,10]. The observation that the practiced sports discipline exerts a greater influence on temperament traits differentiation than does sex is an additional support for this assumption [11,12]. Individuals characterized by greater possibilities of stimulation processing choose disciplines that provide them a greater number of stimuli. These disciplines include combat sports in which competition is of an individual nature [13]. A direct, physical contact with a competitor takes place and there is a significant risk of contusions and injuries. All this increases a stimulating value of this form of activity. Karatekas competing in other formulas of sports fight differ from each other in temperament scales and they don’t distinguish themselves (Oyama karate) with superlative indexes of temperament in comparison with non-contact discipline sports persons (orienteering runners) and University School of Physical Education in Wroclaw students. The obtained results confirm the possibility that there are differences between sportspersons in temperament scales depending on the practiced sport discipline.

Conclusions

Karatekas who prefer different forms of kumite competitions differ from each other in terms of temperament.

The results confirm the hypothesis of sport’s influence on persons who practice karate. Semi contact (shotokan karate) competitors are characterized by high agitation, suppression, balance and an average mobility. Knockdown representatives (kyokushin karate) are characterized by high agitation and balance and an average suppression and mobility. Mix fighting competitors (shidokan karate) are marked by high agitation, suppression, mobility and an average balance. Full contact karatekas (Oyama karate), (orienteering runners and University School of Physical Education in Wroclaw students also) demonstrated an average level in all KT-134 temperament scales (agitation, suppression, balance, mobility).

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References


Address for correspondence:
Pawel Piepiora
University School of Physical Education in Wroclaw, Faculty of Sport Sciences, Department of Sport Teaching, Division of Individual Sports
35 I.J. Paderewskiego street, multifunctional hall, room 73, 51-612 Wroclaw,
e-mail: pawel.piepiora@awf.wroc.pl

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