Image evaluation of karate athletes

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Abstract
The present study aimed to evaluate karate athletes’ image/personality. For this purpose eighty five karate athletes (dan holders) participated in the research. All the subjects answered to a 35-item questionnaire describing the image they have towards karate athletes, in regard to five factors such as social nature, volition nature, active nature, physical nature and emotional nature. Statistical analysis was performed using SPSS version 21.0. All the subjects rated from the average, to somewhat strong and, also, to strong, regarding karate athletes’ image to the items of all the natures. More specifically, athletes’ image about karate athletes was higher as for volition nature (4.17 ±0.48 degrees), active nature (4.08 ±0.47 degrees), and physical nature (3.99 ±0.56 degrees), but lower as for social nature (3.69 ±0.55 degrees) and emotional nature (3.58 ±0.52 degrees). This fact indicates that karate training and fighting effects positively all the natures, but mainly the volition, active and physical nature of karate athletes. So, karate, this martial art, as a part of physical education could be used in a wider sphere in people's permanent physical, moral and mental education.

Key-Words: opinions, martial arts, karate, image, personality.

Introduction
Personality traits appear to have consequences for individuals across a range of life domains because they provide information about how different persons and groups of individuals characteristically self-regulate or how people control their thoughts, feelings and behaviours (Hoyle, 2006). To understand the personality patterns of athletes, researchers have asked whether they differ in personality from non-athletes and whether athletes vary among different sports (Sohrabi, Atashak, & Aliloo, 2011).

Karate (K) is a martial art focusing on self-defense and health improvement that had been developed especially in Japan. The basic characteristics of K, that make it clearly recognizable concerning other fighting sports, are the pointing techniques. In order to award a pointing technique it is necessary to fulfill certain criteria, which are defined by the rules of sport fight (Rulebook WKF). Pointing techniques in karate are kicks and punches that can be realized through three basic ways of pointing in sport fight - attack, interception and counterattack (Koropanovski, & Jovanovic, 2007).

In K, the Kumite contest (a real fight) is a dyadic encounter, whereas the highly ritualized Kata is an individual (i.e. solitary) performance in front of a mirror while “imagining” an opponent. The training of K contains three parts: “Kihon,” basic exercise, which is mainly characterized by the attention to and repetition of particular movements or a combination of them; “Kumite,” exercises with sparring partner, the main goal is to train “together with” and not “against” the partner; and “Katas,” detailed patterns of movements, where sequences of different moves are intersected (Jansen & Dahmen-Zimmer, 2012). Owing to this fact, K might well offer a better opportunity to analyse the individual personality traits and specific responses to a situation as it avoids the confounding effect of reacting to an (albeit passive) opponent.

Karate which constitutes a system of combat and self-defence, today, is usually practised as a sport having, though specific means of accomplishing particular aims and tasks, and a great impact on shaping personalities and attitudes. “In K do we encounter an attitudinal tendency towards the opponents, expressed by the desire to dominate the competition, by aggressive fighting, by the attempt to win supremacy over the others, but also an attitudinal tendency towards oneself, expressed by the spirit of combat and sacrifice, by the permanent desire for self-improvement etc. Attitudes play an important role in the competitor’s personality structure, by determining both the development and the valorization of his capacities” (Macovei, Lambu, Lambu, & Predoiu, 2014).

Karate training is directed on general coordinating abilities with its systems and a method is directed for optimal general development children’s personality, his mind and psychic (Čapulis, 2010). It is a psychophysical activity which makes cognitive abilities and movement effectively combine in order to achieve the karateka’s aim (Mori, Ohtani, & Imanaka, 2002). Karate helps in developing characteristics such as persistence, courage and team-cooperation, an ability to overcome difficulties, self-discipline and honesty (Lakes & Hoyt, 2004).
The interest from a psychological perspective in martial arts in general, and K in particular, has grown since the early publications on personality of martial arts athletes and K practitioners in the 1960’s and 1970’s (Kroll & Carlson, 1967; Kroll & Crenshaw, 1970; Duthie et al., 1978). As for karate, more recent research was concerned with attributions of control (Madden, 1990), self-esteem (Richman & Rehberg, 1986) and anxiety (e.g., Williams & Elliott, 1999; Layton, 2000). Nevertheless, research should focus much more on athletes’ personalities, because they help to solve many problems connected with the efficiency of training and success in sport competition. However, research into the effects of martial arts training in general and, more specifically, into karate training, remains a relatively young area in behavioural science research. For these reasons, the purpose of the present study was to examine the karate athletes’ characteristics according to their image/personality.

**Material and Methods**

**Sample**: eighty five (85) men aged 21.85±10.88 years dealing with karate as athletes (dan holders) participated in the research. All participants signed informed consent forms and received full verbal explanations of the purpose of the study. It was also explained to subjects that they could withdraw from the study at any time. Procedures were in agreement with ethical standards of the Declaration of Helsinki of the World Medical Association 2000.

**Questionnaire.** All the subjects answered to a 35-item questionnaire describing the image they have towards those people who are doing karate. Regarding the examination of the opinions about karate athletes’ personality (image toward people already doing karate), the used questionnaire was compiled by Matsumoto et al. (1984), having as a reference Ogata’s and Soeda’s (1979) research and was first examined the opinions about judo athletes image. The 35 items concerning the factors of each nature were evaluated on a 5-level scale.

1) Social nature (8 items), 2) volition nature (7 items), 3) active nature (7 items), 4) physical nature (7 items) 5) emotional nature (6 items). The 35 items concerning the factors of each nature were evaluated on a 5-level scale. These values were then converted and an average scale made. The differences area by area in evaluation of the survey areas was investigated. The questionnaire was translated into Greek by bilingual individuals, taking into account the grammar of the language so that the meaning was correctly expressed.

**Statistical Analysis.** Statistical analysis was performed using SPSS version 21.0. The non-parametric test Kolmogorov-Smirnov was used to evaluate samples’ normal distribution. Moreover, the descriptive analysis was used for the extraction of descriptive statistics.

**Results**

![Figure 1. Athletes’ rating to the items of Social Nature](image)

In Figure 1, athletes rating to the 8 items regarding the social nature are presented. Athletes rated above the average in all the items, while in the items of “having a sociable nature”, “having a sense of justice” and “being cooperative” they rated from somewhat strong to strong.
Figure 2. Athletes’ rating to the items of Volition Nature

In Figure 2, athletes’ ratings to the 7 items regarding the volition nature are presented. Athletes rated high in all the items of the volition nature. However the image of “having an independent nature” was lower than the other items.

Figure 3. Athletes’ rating to the items of Active Nature

In Figure 3, athletes’ ratings to the 7 items regarding the active nature are presented. Athletes rated quite high in all the items of the active nature. However the images of “being combatative”, “being active”, “having power of concentration” and “being cautious” were higher than the other items.

Figure 4. Athletes’ rating to the items of Physical Nature
In Figure 4, athletes’ ratings to the 7 items regarding the physical nature are presented. Athletes rated quite high in all the items of the physical nature. However the images of “having confidence in one’s body” and of “movement being alert” were higher than the other items.

![Figure 4. Athletes’ rating to the items of Physical Nature](image)

In Figure 5, athletes’ ratings to the 6 items regarding the emotional nature are presented. Athletes rated quite high in the most items of the emotional nature. However the image of “being carefree” was lower enough than the other items.

![Figure 5. Athletes’ rating to the items of Emotional Nature](image)

In Figure 6, athletes’ rating to the five natures (social, volition, active, physical, and emotional) are presented. Athletes rated high in all the natures. However athletes’ image about karate athletes was higher as for volition nature, active nature and physical nature, but lower as for social nature and emotional nature.

![Figure 6. Athletes’ rating to the five natures](image)

Discussion

The aim of the current study was to examine the K athletes’ characteristics according to their personality and image, defined as “a physical experience born out of the memory elements accumulated by past kinetic experience of all five senses, and such how physical movement provides a continuity through a fixed time” (Tsuruhara, Watanabe, Nakagawa, & Araki, 1981). In the present study, K training seems to have a positive effect on the image/personality of the athletes on the five natures (volition, active, physical and emotional) in agreement with earlier studies that reported positive impact of martial arts training on personality traits (Vertonghen & Theeboom 2010; Zaggelidis, Mavrovouniotis, Argiriadou, & Zaggelidou, 2009). However athletes’ image about karate athletes was higher for the volition nature, active nature and physical nature, than on social nature and emotional nature. Within the general psychological domain, there appears to be affective, cognitive, social and behavioural benefits from martial arts training. Affective factors related to martial arts training involve higher self-esteem (e.g., Richman & Rehberg, 1986; Trulson, 1986; Finkenberg, 1990), a more positive response to physical challenges in order to rationalize the utilization of physically based methods to promote psychological well-being (Fuller, 1988), greater autonomy (Duthie, Hope, & Barker, 1978), emotional stability...
Karate do has in view the following psychic qualities: fighting spirit, creativity, practical intelligence, capacity of control and self-control, spirit of sacrifice, intelligence, motivation, combativeness, aggressiveness, tenacity, quick thinking, etc. (Deliu, 2008). Consequently it’s fundamental for researchers and practitioners to identify what sport activities are able to improve the evolution both in motor and cognitive domain (Vaeyens, Lenoir, Williams, & Philippaerts, 2008). Chaabene et al. (2012) define the most significant physical and physiological characteristics of karate athletes since martial arts enhance muscle power at lower loads, vertical jump performance, maximal power and maximal velocity flexibility, and aerobic performance capacity. They could also contribute to the cognitive functioning comprising reaction time and motor time, information processing speed (time required to complete a series of operations), working memory (Alesi et al., 2014).

Cognitive factors influenced positively by martial arts training include concentration (Konzak & Boudreau, 1984) and a greater awareness of mental capacities as well as a cultivation of that potential (Seitz, Olson, Locke, & Quam, 1990). King and Williams (1997) found “a goodness of fit between martial arts and task orientation” (goal setting). This is not unexpected given the arranged to goal setting engendered by the belt ranking system within martial arts. Karate proved to be a physical activity capable of changing memory abilities and executive functioning and not simple technical elements while training sessions. The practice and pedagogy of kata involves a cognitive (for developing technique) as well as a physical element, and contributes in the holistic spirituality (Dodd & Brown, 2014). In this perspective, K revealed to be a physical activity able to stimulate memory abilities and executive functioning and not simple technical elements during training sessions.

Karate “Kumite” is a full contact sport that focuses on the philosophical, moral, and ethical principles featuring the martial arts (Burke, Al-Adawi, Lee, & Audette, 2007). Especially it includes a mixture of techniques used in the competition between two opponents aimed at the disqualification. Given its nature of discipline focusing on self-protection and health enhancement, karate would be regarded as sport and therapy at once (Alesi et al., 2014). Comparing the main differences between K black belt athletes and other non-athletic general population in respect to self-confidence and mental alertness, it has been concluded that the former have a higher level of advantages on these variables over the latter and the variables are positively correlated for the former (Vijayakumar, & Balakrishna Murthy, 2015). Besides, K training brought about a marked improvement in children’s self-confidence, self-control, strength and prowess as well as in children’s character.

In reference to the decrease of aggressive tendencies Grabert (1996) went so far as to say “the strong emphasis on mastering techniques in K, repetition in training and the delaying of participation in competition including combat are considered to be ways towards achieving this goal”. A negative relation between expertise in taekwondo/karate and aggressive behavior has been reported (Nosanchuk, 1981; Trulson, 1986; Nosanchuk & MacNeil, 1989; Skelton, Glynn, & Berta, 1991; Mroczkowska, Kownacka, & Obminski, 2008). Karate training always reduces aggressiveness level due to personality developing kata exercises and meditation (Reynes & Lorant, 2004), while it could be beneficial on anger control (Ziaee, 2008).进一步训练改善更多运动员的认知能力（Vaeyens et al., 2011） showed lower levels of aggression among athletes of the martial arts in comparison with the non-athletes. Further, martial arts practice improves socialization (Lantz, 2002) intellectual ability (Ryan, 2008) and morality (Lantz, 2002). Moreover, K helps in developing characteristics such as awareness, persistence and patience, confidence, team-cooperation, an ability to overcome difficulties, self-control and self-discipline, courage and honesty (Kalinowski, 1976; Lakes, & Hoyt, 2004). In agreement, it was found out that athletes in the present study consider that K athletes in a high degree have a sense of justice and a sociable nature, are cautious, active, and combative, have the power of concentration, strong sense of responsibility, courage, power of decision, perseverance and a strong will, are hard workers, movement alert, have confidence in their bodies and physical endurance. In similar conclusions resulted Zaggelidis, Mavrovouniotis, Argiriadou, & Ciucurel, (2013) in their research concerning opinions about judo athletes’ image.

Thus, it could be said that some of the benefits resulting from K practice are simply the benefits of exercise, and similar benefits may result from enrolling a child or an athlete in any sport that features extended body movement and regular exercise. However, the real benefits of martial arts practice in general and more specifically of K practice are mental (some would say spiritual) rather than physical. Most martial arts incorporate meditation and relaxation training, learning how to focus and release energy, moving in tandem with a partner as well as striving to excel alone, and achieving mind-body unity (Budnik, 2009). This meditation...
increases calmness and improves psychological equilibrium. Karate is meant to improve personal growth. Respecting others as well as endeavor is considered of essential importance.

The physical exercise and mastery is, really, the means to a non-physical end. Whether one calls this state of mind enlightenment (Back & Kim, 1981), self-knowledge or achieving balance (Levine, 1984) what the practice of martial arts ultimately works toward is a healthy mind, a healthy spirit, and a healthy body (Reid & Croucher, 1995), as cited in Ripley (2003). According to Alesi et al. (2014), K practice may influence cognitive development through various pathways: “1) neuro-physiological by inducing alterations in the brain structure; 2) related by producing an “enriched environment”; 3) social by creating opportunities of social interaction, cooperation with others, respecting rules, sharing leisure experiences, receiving the encouragement of peers; 4) motivational by increasing self-concept and self-awareness. In conclusion, karate practice appears to represent an exercise program retaining physical and psychological positive results during the life span”.

Conclusions
Karate athletes’ image evaluation showed that karate athletes in a high degree have a sense of justice and a sociable nature, are cautious, active, and combative, have the power of concentration, strong sense of responsibility, courage, power of decision, perseverance and a strong will, are hard workers, movement alert, have confidence in their bodies and physical endurance.

In karate athletes’ the specific training, kata combined with meditation, influences athletes’ image.

This fact indicates that karate training and fighting effects positively all the natures, but mainly the volition, active and physical nature of karate athletes. Karate, this martial art, as a part of physical education could be used in a wider sphere in people's permanent physical, moral and mental education.

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