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## THE PERSONALITY PROFILE OF TOP PERFORMANCE ATHLETES IN KARATE DO

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### Abstract

The karate do practice can be considered a school of life and, by observing its principles in the physical and mental applications, we can improve our spirit and achieve our knowledge expansion, which enables us **to enrich our personality!**

Karate do permanently contributes to the individual's development, it being an open door to the limits that are to be exceeded and the plenitude of this art resides in the **spirit-psychic-body** communion! In the spirit-psychic-body communion, the most important one is the spiritual attitude, even if karate is performed as a combat sport.

The present paper aims at creating the karate do athletes' personality profile, which we consider to be important to their training management.

To elucidate our study, we used the case study method and the graphical representation method. In this sense, we administered the ZPKQ personality questionnaire and the Endler Multidimensional Anxiety Scales - Perception (EMAS-P, SAS-P), tests included in the CAS<sup>++</sup> digital platform for the psychological assessment, created by Cognitrom. The subjects of our research were top performance athletes at the "Rapid" Sports Club of Bucharest, seniors, components of the WKC National Karate Squad. Testing was performed within the UNEFS Psycho-Pedagogy Lab, under the supervision of Assistant Lecturer Radu Predoiu, Doctor of Psychology.

We find out that the investigation of personality traits represents a valuable documentation for the athletes' training management and for their preparation improvement, which can lead to better competitive results. At the same time, we notice that the combative spirit, creativity, practical intelligence, the control and self-control capacities, combativeness, aggressiveness, quick thinking etc. are psychic qualities indispensable to a top performance karate fighter.

*Keywords:* karate do, performance, personality profile.

### Introduction

There are many opinions of the specialists about the importance of practicing karate do. In this context, D. Deliu considers karate do as an art that presents a maximum efficiency under the aesthetics and the elegance conditions and that supposes technical perfection. In his turn, Frédéric (1993, p. 7) considers martial arts as a universe in itself, a captivating one, which couldn't be discovered in its whole complexity not even if man had been given to live many lives one after another!

At the same time, the karate do principles transferred to the physical and mental practices help us improve our spirit and expand our knowledge, **by enriching our personality**, that is why karate do can be considered a school of life (Deliu, 2008, p. 121).

Karate do permanently contributes to the individual's development, being an open door toward limits that are to be exceeded and the plenitude of this art resides in the **spirit-psychic-body** communion! In the spirit-psychic-body communion, the most important one is the spiritual attitude, even if karate is performed as a combat sport.

According to Deliu, 2008, the training in the fundamental techniques, conjugated with the study of the combat forms and variety, leads to the simultaneous training of the karate fighter's physical and psychic components. Under real conditions, a psychically well-prepared karate fighter will win even if, physically, he is less prepared.

In accordance with the above-mentioned aspects, we consider the following quotation as a motto of our paper: **"The performance maximization can't be reached without the athlete's personality maximization"** (Epuran, 1990).

Sports psychology is concerned with the psychic phenomena and with the behavior of those who practice sports (activities with an agonistic, ludic and gymnastic character) predominantly oriented to performance, to surpassing oneself, the opponent or the nature (Epuran, 2001, p. 4).

The psychic capacity is energetically and attitudinally supported by the temperamental, characterial, motivational, affective and volitional traits. Personality represents the distinctive and characteristic pattern of the thought, affectivity and behavior that

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define the individual's personal style and influence his interaction with the environment. Consequently, we emphasize the psychic capacity position as an element integrated into the performance capacity, with which it perfectly interacts. It shouldn't be understood as a summative element, but as a crucial element meant to regulate and control the performance capacity in its whole.

As to the concept of "personality", it represents the totality of psychic qualities of a person, which are submitted, in the course of time, to the structuring process that not only differentiates among them, but also valorizes them, by making them unique (Zlate, 2009, p. 253).

Allport (1981, p. 253) defines personality as the dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought.

Reuchlin (1992, quoted by Dafinoiu, 2002) considers that personality is a stable characteristic feature of a person, in relation to his way of reacting to the situations he is confronted with.

By starting our commentary from the idea according to which the performance maximization can't be reached without the athlete's personality maximization, we can state that the athlete's performance behavior will include his capacity of expression, his desire of self-assertion, his effort and his commitment, as well as the requirements and the pressure of his social environment.

Thus, we think appropriate to make reference to the 4 essential performance-related factors, represented by aptitudes, attitudes, training and ambience (Epuran, 1990, p. 38).

In sports, a particular emphasis is placed on the motor aptitudes, but we shouldn't ignore the importance of the intellectual ones, among which we shall mention those considered by Most (1982, quoted by Epuran, 2008) to be necessary for the performance obtaining, namely: quick analysis and synthesis of the situations, understanding the opponent's tactics, knowing the partner's state of spirit, capability to focus on the action, to choose among different solutions, to make decisions and to take action (Epuran, 2008, p. 37-61).

These last aptitudes are extremely important to the karate fighters, if we take into account that they practice a heuristic sport, with unpredictable and combative opponents, with actions performed at maximal intensity and under the time pressure specific to each competitive fighting (the last 30 seconds of the contest).

In karate do, we can notice an attitudinal tendency toward the opponents, expressed by the desire to dominate in the competitions, by the aggressive fighting, by the attempt to win the supremacy over the others, as well as an attitudinal tendency toward 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 the development and the valorization of his own capacities.

Ambience, implicitly the sports environment in karate do, influences the psycho-sociological status-related behaviors, but also the preferential, organizational and cultural relationships. The karate do practice in an organized framework confers the athlete a feeling of belonging, communication, socialization, self-esteem and respect from the others.

As to the training, this is the most complex structure that includes all the components of the performance capacity and that highlights all the aspects which will render efficient the competitive results.

The main psychic qualities specific to karate do are the following: spirit of combat, creativity, practical intelligence, capacity of control and self-control, spirit of sacrifice, intelligence, motivation, combativeness, aggression, tenacity, quick thinking etc. (Deliu, 2008, p. 137).

### **Purpose of the research**

The present paper is a starting point for a study related to the athletes' personality profile and it can represent a prediction factor for the competitive performances of the karate do fighters. Thus, our work aimed at creating the karate do athletes' personality profile, considered by us to be important to their training management and to the increase of their performance level.

### **Methods**

To elucidate our study, we used the case study method and the graphical representation method.

Our subjects were top performance athletes at the "Rapid" Sports Club of Bucharest, juniors and seniors, five boys and four girls, components of the WKC National Karate Squad, practitioners, for more than 10 years, of the Goju-Ryu style from the karate do branch.

In order to complete our study, we used tests included in the CAS<sup>++</sup> digital platform for the psychological assessment, created by Cognitrom. In this sense, we administered the ZKPQ personality questionnaire and the Ender Multidimensional Anxiety Scales – anxiety as a Perception (EMAS-P, SAS-P) and as a State (EMAS-S). The tests were performed within the UNEFS Psycho-Pedagogy Lab, under the supervision of Assistant Lecturer Radu Predoiu, Doctor of Psychology, on February 20<sup>th</sup>, 2013, in the preparatory period.

In modern times, the terms "test" and "testing" are more and more frequently used, by tending to become usual terms, due to the creation of some special means for the assessment of human qualities and for the prognosis of their evolution in the course of time, they being essentially imposed by the school and vocational selection or orientation.

In psychology, the word “test” has an accurate significance, by designating a certain psychodiagnostic tool (Horghidan, 1997, p. 69).

The test represents, according to the definition adopted by the International Psycho-Technical Association, “a definite trial involving a task to fulfill, which is identical for the examined subjects and is based on a precise technique meant to assess success or failure through the numerical grading” (Cesari, 1989, p. 11).

The tests used in our research aim at investigating personality, reasoning and the anxiety traits.

Starting from the psychological significance of the trials, P. Pichot distinguishes two big categories: personality tests and efficiency tests.

Personality tests represent subtle tools designed to reveal some specific reaction modalities, some isolated traits, a group of traits or the personality organization trend. The great number and particularly the great variety of personality tests render difficult their classification, but usually they are divided into analytical tests and synthetic tests.

Analytical personality tests are destined to the study of some delimited characteristics of the personality. In most of the cases, these tests involve questionnaires with a variable number of questions that require the subject to give open or closed answers, in order to reveal one single personality variable

(uniphasic questionnaire) or many variables (multiphasic questionnaire).

Synthetic personality tests investigate complex aspects of the personality (Horghidan, 1997, p. 74,78) and are represented by the questionnaires.

“The questionnaire is a system of questions formulated so that we collect as accurate data as possible about a person or a social group” (Cosmovici, 1996, quoted by Tudor, 2005:37).

Thus, through the personality questionnaires, we can diagnose the traits, which actually express the attitudes of a person toward himself.

The **Zuckerman-Kuhlman Personality Questionnaire (ZKPQ)** assesses five scales, namely: sociability, impulsive sensation seeking, activity, neuroticism-anxiety and aggression-hostility.

By using the true-false versions of the items on the sensation seeking scale, but also items from other personality scales, Zuckerman and his co-workers (1993) analyzed their factors, which resulted in the construction of a more extended personality questionnaire including the five above-mentioned factors. One of these factors is completely made up of items that refer to impulsivity and the sensation seeking, being called “impulsive sensation seeking”.

The revised version of the ZKPQ questionnaire contains 99 items grouped on five scales that we shall describe in the following lines.



Figure 1. Components of the Zuckerman-Kuhlman Personality Questionnaire

**Sociability** includes 17 items referring to parties and friends, which indicate the preference for the parties with many people and the interaction with them. The latter factor reveals, for the extroverts, their intolerance to social isolation, and for the introverts, their inclination to solitary activities.

**Impulsive sensation seeking** encompasses 19 items that highlight two factors, impulsivity and sensation seeking. The items contained by the “impulsivity” factor describe the lack of planning and the tendency to act in an impulsive way, with no previous reflection. The “sensation seeking” factor describes the general need for sensation and agitation, the preference for unpredictable situations and friendships, as well as the need for change and novelty. There is no special mention related to

specific activities, such as alcohol and/ or drug consumption or other sports involving higher risks. These items were eliminated, in order to limit some conclusions when investigating the persons who participate in such activities.

**Activity** is made up of 17 items that compose two groups, as follows: one group of items describes the need for general activity, the lack of patience and the anxiety state when there is nothing to do, and the other group of items (the work effort) indicates the preference for a diversified and sustained work, but also a high energy level when performing the daily activities and other tasks.

**Anxiety-Neuroticism** comprises 19 items that describe the annoyances, the emotional tensions, the worries, the constant indecisions, the

lack of self-confidence and the sensibility (<http://www.scribd.com/doc/123769900/personality-questionnaire>).

**Aggression-Hostility** includes 17 items that describe the moments when the subjects are susceptible to have a hostile behavior.

**EMAS-P** and **SAS-P** represent a measure of the subjective perception on the type of situation and on the intensity of the threat evoked by that situation at the testing moment. These ones assess seven scales of the perception anxiety, namely: social evaluation, physical danger, new and ambiguous situation, daily routine, separation from the beloved and self-disclosure.

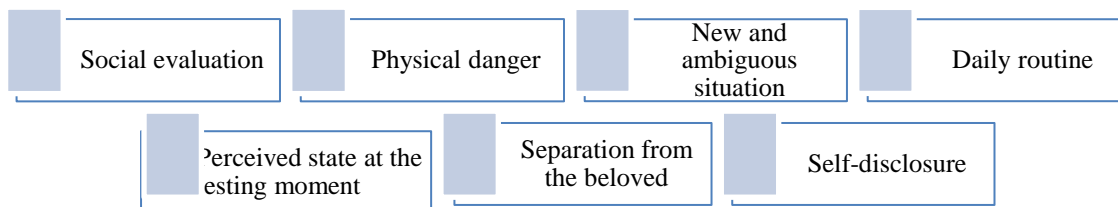


Figure 2. Components of the perception anxiety test – EMAS-S and SAS-P

**EMAS-S** assesses the current subjective state of anxiety, namely the anxious-type responses felt at a certain given moment in the course of time. EMAS-S

includes the emotional-physiological scale, the cognitive scale and the total score of the state anxiety.

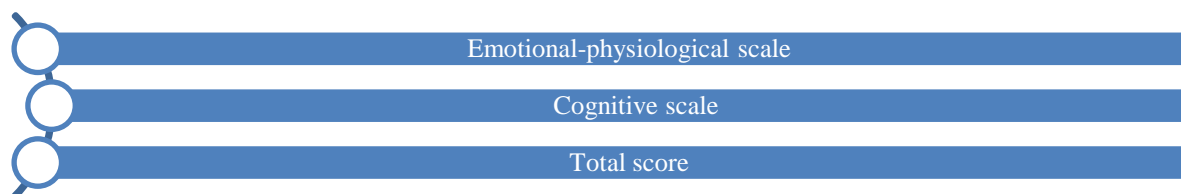


Figure 3. Components of the state anxiety test – EMAS-S

After the administration of the personality and anxiety questionnaires, but also of the analytical reasoning test, on the basis of the correction grid, we calculated the score for each trial and the respective score was interpreted with

the CAS<sup>++</sup> digital platform for the psychological assessment, created by Cognitrom.

**Results**

The obtained results were tabulated and assessed through score items related to the achieved level, under the qualitative aspect.

1. Results obtained at the Zuckerman-Kuhlman Personality Questionnaire (ZKPQ)

Table 1. Zuckerman-Kuhlman Personality Questionnaire (ZKPQ)

No.	Surname and name	Sociability scale		Impulsive sensation		Activity scale		Neuroticism-anxiety		Aggression scale		Desirability
		Score	Level	Score	Level	Score	Level	Score	Level	Score	Level	
1.	A.G.	49	2	59	2	64	3	55	2	50	2	4
2.	B.D.C.	61	3	45	2	64	3	39	1	67	3	1
3.	B.F.	61	3	53	2	57	2	44	2	53	2	3
4.	B.R.M.	66	3	53	2	47	2	58	2	56	2	3
5.	I.V.R.	53	2	53	2	57	2	49	2	70	3	4
6.	L.E.A.	58	2	40	2	53	2	59	2	45	2	1
7.	L.I.S.	60	2	53	2	53	2	40	2	56	2	1
8.	S.D.M.	55	2	43	3	56	3	36	2	40	3	1
9.	T.A.I.	51	2	73	2	64	2	58	1	61	2	2

Based on the data resulted from the administration of the ZKPQ personality questionnaire, by means of the correction grid, we calculated the score for each scale assessed by ZKPQ. Relying on this score, the software of the CAS<sup>++</sup> digital platform for the psychological assessment, created by Cognitrom, indicates us the level corresponding to each score.

We can thus obtain the classification on levels and the level corresponding to each score from 1 to 3, where level 1 ranks the subjects with scores comprised between 0 and 40 below the population mean, level 2 ranks the subjects with scores comprised between 40 and 60 within the population mean and level 3 ranks the subjects with scores comprised between 60 and 100 above the population mean.

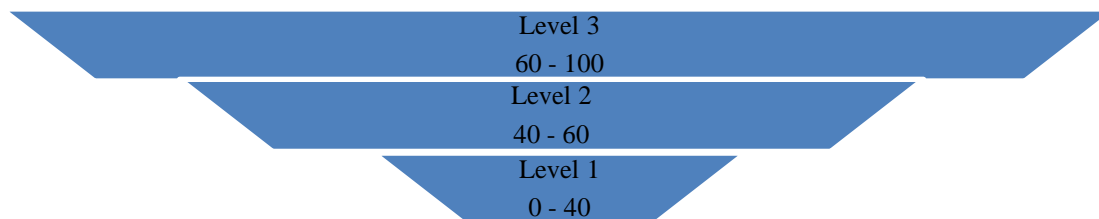


Figure 4. Classification on the three levels of the ZKPQ personality questionnaire

Thus, as we can notice in table 1, on the **sociability scale**, six athletes, A.G., I.V.R., L.E.A., L.I.S., S.D.M. and T.A.I., obtained scores between 49 and 60, which ranked them on level 2, within the population mean, under the sociability aspect. B.D.C., B.F. and B.R.M. obtained scores between 61 and 66, which ranked them on level 3, above the population mean. These ones have many friends, they are pleased to be with other people and they can animate the parties.

On the **impulsive sensation seeking scale**, almost all our athletes obtained scores comprised between 40 and 60, which ranked them within the population mean, on level 2. The subject T.A.I. obtained the score 73, which ranked him on level 3, above the population mean. This one searches for new experiences, with environmental changes and strong sensations, he acts under the impulses of the moment and he can be non-conformist.

On the **activity scale**, three athletes, A.G., B.D.C. and T.A.I., were ranked on level 3, above the population mean, their score being 64. These ones feel the need for permanently being in activity, unlike the

other six subjects who are within the population mean, from the point of view of their desire for activity.

On the **neuroticism-anxiety scale**, the subjects A.G., B.F., B.R.M., I.V.R., L.E.A., L.I.S. and S.D.M. had scores comprised between 36 and 58, which ranked them on level 2, namely within the population mean. Only two athletes, B.D.C. and T.A.I., obtained the score 39, respectively 58, which ranked them on level 1, under the population mean. These ones are self-controlled persons, who don't worry about unimportant things.

On the **aggression scale**, three subjects, B.D.C., I.V.R. and S.D.M., obtained scores between 40 and 70, which ranked them on level 3, above the population mean. These ones directly express their annoyance and they argue with those who have another opinion than theirs. The other seven athletes had scores comprised between 40 and 60, which ranked them on level 2, within the population mean.

On the **social desirability scale**, the athletes didn't distort their answers to the questionnaire, by trying to create a favorable image about themselves.

## 2. Results obtained at the perception anxiety test – EMAS-P and SAS-P

Table 2. Perception anxiety – EMAS-P and SAS-P

No.	Surname and name	Social evaluation	Physical danger	Ambiguity	Daily routine	Threat scale	Separation	Self-disclosure
1.	A.G.	57	62	55	53	63	60	57
2.	B.D.C.	35	40	62	35	42	61	39
3.	B.F.	35	54	62	49	50	46	48
4.	B.R.M.	44	47	45	42	50	53	56
5.	I.V.R.	44	47	45	42	42	46	48
6.	L.E.A.	52	47	45	58	50	46	46
7.	L.I.S.	36	40	38	51	42	39	37
8.	S.D.M.	52	40	38	65	42	39	37
9.	T.A.I.	53	54	54	56	50	46	65



After the analysis and interpretation of the data resulted from the perception anxiety testing, on the basis of the correction grid, we can notice, in table 2, the representative score for each subject.

These scores rank the athletes on three levels, from 1 to 3, where level 1 is below the population

mean, level 2 represents the population mean and level 3 is above the population mean. The scores comprised between 0 and 40 rank the athletes on level 1, those between 40 and 60 rank them on level 2 and those comprised between 60 and 100, on level 3.

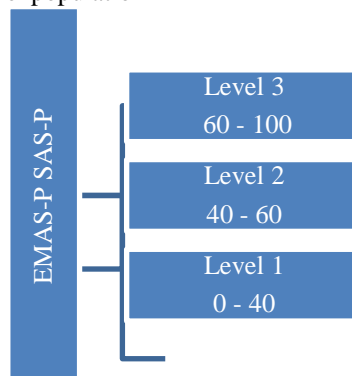


Figure 5. Classification on the three levels of the anxiety test – EMAS-P and SAS-P

EMAS-P and SAS-P measure the subjective perception on the type of situation and on the intensity of the threat evoked by that situation at the testing moment. These ones assess seven scales of the perception anxiety, namely: social evaluation, physical danger, new and ambiguous situation, daily routine, separation from the beloved and self-disclosure.

In the case of the **social evaluation scale**, we can notice, in table 2, the scores obtained by our subjects. These scores rank five athletes, B.D.C., B.F., B.R.M., I.V.R. and L.I.S., slightly below the population mean. The athletes L.E.A. and T.A.I. obtained scores ranking them within the population mean and A.G. was ranked slightly above the population mean.

The **physical danger scale** shows that three subjects, B.D.C., L.I.S. and S.D.M., are ranked below the population mean, which indicates that the years of experience in the practice of this sport, karate do, confer them enough confidence in their own capacities. Five subjects, B.F., B.R.M., I.V.R., L.E.A. and T.A.I., are ranked within the population mean, which proves that, although they have been practicing this sport for more than 10 years, they perceive the physical danger like anybody else. One single athlete, A.G., is ranked slightly above the mean.

The **ambiguity scale** presents the subjects B.R.M., I.V.R., L.E.A. and T.A.I., who are ranked within the population mean. The subjects L.I.S. and S.D.M. are ranked slightly below the population mean, while B.D.C., B.F. and A.G. are ranked slightly above the population mean.

As to the **daily routine scale**, the athletes L.E.A., S.D.M. and T.A.I. are ranked slightly above the population mean, which indicates that they perceive the sports activity, the participation in training sessions,

training camps and competitions as a constant part of their life. The subjects B.D.C., B.R.M. and I.V.R. are slightly below the population mean, while A.G., B.F. and L.I.S. are ranked within the population mean.

On the **threat scale**, we can notice that the subjects B.D.C., I.V.R., L.I.S. and S.D.M. are slightly below the population mean, which shows that they didn't feel threatened at all at the testing moment. The subjects B.F., B.R.M., L.E.A. and T.A.I. are ranked within the population mean, namely they felt as threatened as any other person who had been previously submitted to this testing. The athlete A.G. is slightly above the population mean, which indicates that he felt a little bit more threatened in the situation at the testing moment.

On the **separation scale**, as we can notice in table 5, the subjects B.D.C. and A.G. are ranked slightly above the population mean, which shows that they feel the separation from the beloved in a stronger way than the majority of the population. The athletes L.I.S. and S.D.M. are slightly below the population mean, which makes us conclude that they tolerate the separation from the beloved in a better way than the others. The subjects B.F., B.R.M., I.V.R., L.E.A. and T.A.I. are ranked within the population mean.

The **self-disclosure scale** reveals that the subjects B.R.M., A.G. and T.A.I. are ranked slightly above the population mean, which indicates that their perception level of the situation at the testing moment was that of self-disclosure. The subjects B.D.C., L.I.S. and S.D.M. are ranked slightly below the population mean, which shows that they didn't perceive the testing moment as a self-disclosure moment, while the subjects B.F., I.V.R. and L.E.A. are ranked within the population mean.

### 3. Results obtained at the state anxiety test – EMAS-S

Table 3. State anxiety – EMAS-S

No.	Surname and name	Emotional-physiological scale	Cognitive scale	Total score
1.	A.G.	63	62	63
2.	B.D.C.	43	44	43
3.	B.F.	51	47	49
4.	B.R.M.	43	46	44
5.	I.V.R.	59	59	59
6.	L.E.A.	48	41	44
7.	L.I.S.	42	41	41
8.	S.D.M.	43	42	43
9.	T.A.I.	68	71	70

The state anxiety analyses three scales, namely: the emotional-physiological scale, the cognitive scale and the total score scale.

After the analysis and interpretation of the data resulted from the state anxiety testing, on the basis of the correction grid, we can notice, in table 6, the representative score for each subject.

These scores rank the athletes on three levels, from 1 to 3, where level 1 is below the population mean, level 2 represents the population mean and level 3 is above the population mean. The scores comprised between 0 and 40 rank the athletes on level 1, those between 40 and 60 rank them on level 2 and those comprised between 60 and 100, on level 3.

EMAS-S	Level 3
	60 - 100
	Level 2
	40 - 60
	Level 1
	0 - 40

Figure 6. Classification on the three levels of the state anxiety test

On the **emotional-physiological scale**, we can notice that the athletes B.D.C., B.R.M., L.I.S. and S.D.M. are ranked slightly below the population mean, the athletes A.G., I.V.R. and T.A.I. are slightly above the population mean and the athletes B.F. and L.E.A. are ranked within the population mean.

The **cognitive scale** shows that the subjects B.D.C., L.E.A., L.I.S. and S.D.M. are ranked slightly below the population mean, the subjects A.G., I.V.R. and T.A.I. are ranked slightly above the population mean and B.F. and B.R.M., within the population mean.

As to the **total score scale**, we can notice, depending on each subject's score, that B.D.C., B.R.M., L.E.A., L.I.S. and S.D.M. are ranked slightly below the population mean, A.G., I.V.R. and T.A.I. are ranked slightly above the population mean and B.F., within the population mean.

### Discussions

Publications with a central topic on psychology, personality, address issues in terms of personality formation in students, teenagers or presents basic issues related to it. Of sports psychology publications, we mention books with the following titles: "Coach's Psychological Guide", "Athlete's Psychological Preparation", both written by Mihai Epuran, or "Psychological Profiling of the Judoka Successful Athlete" of conf. Univ. Dr. Mircea Ion Ene and "Understanding Psychological Preparation for Sport: Theory and Practice of Elite Performers" by Hardy, L., Graham, J., Gould, D.

By analyzing the data resulted from the administration of the three tests considered by us representative for the creation of the top karate do athletes' personality profile, we achieved its synthesis, which is presented in the following table.

Activity	•He is in activity like any other person
Sociability	•Extrovert person •Sociable person •Need for permanent experiencing
Aggression	•He is not an aggressive person
Social evaluation	• He doesn't perceive himself as being assessed in a new and ambiguous situation • He doesn't perceive himself as being in a physical danger • The karate do practice has become a daily routine activity
Separation	• He feels the separation from the beloved less than the other people • He speaks sincerely about his problems
State anxiety	• It is slightly below the population mean

### Conclusions

1. We find out that the spirit of combat, creativity, practical intelligence, the capacity of control and self-control, combativeness, aggression, quick thinking etc. are psychic qualities indispensable to a top performance karate fighter.

2. Another important aspect refers to the fact that, although the subjects practice a combative, an aggressive sport, they are very kind, conscientious, extrovert, active and emotionally stable persons.

3. Another conclusion drawn from the interpretation of the data resulted from the administration of the perception anxiety test refers to the fact that the athlete doesn't perceive himself as being in a physical danger in his daily life, which can be due to the karate do practice for more than 10 years, and this has led to its perception as a daily routine.

4. We find out that the administration of personality tests offers the karate do athlete's profile, which enables the coach to individualize the sports training and to direct the sports preparation under all its branches, by improving thus the competitive results.

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