

Idiocentric and allocentric profile, gender schemas of self-concept, and subjective social status of judo athletes

Authors' Contribution:

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

Fernando L Cardoso^{1ADE}, Elisa P Ferrari^{1AD}, Rubiane G Pereira^{2ABD}, Leandro C Lima^{2ABD}, Thiago E Medeiros, Mariluce P Vieira^{2D}, Gislane Ferreira de Melo^{3D}

¹ Santa Catarina State University (UDESC), Graduate Program in Human Movement Sciences and Graduate Program in Education/Laboratory for Gender, Sexuality, and Corporeality Studies (LAGESC), Florianópolis, Brazil

² Western Santa Catarina University (UNOESC), Physical Education Undergraduate Program, Chapecó, Brazil

³ Catholic University of Brasília (UCB), Graduate Program in Physical Education, Brasília, Brazil

Received: 21 August 2015; **Accepted:** 14 April 2016; **Published online:** 04 November 2016

AoBID: 11355

Abstract

Background & Study Aim:

The aim of elite sports is to achieve improved performance, which is modulated for psychological aspects. The main objective of this study was to identify the idiocentric-allocentric profile, gender schemas of self-concept, and subjective social status of judo athletes.

Material & Methods:

The study included 63 athletes (35 male and 28 female) with a mean age of 21.86 ± 6.77 and 19.46 ± 4.24 years, respectively. The *Idiocentric-Allocentric Profile Inventory (I-A Profile)*, the *Gender Schemas of Self-Concept Inventory*, and the *MacArthur Scale of Subjective Social Status* were administered. Data were analysed in SPSS version 20.0 and descriptive statistics were calculated using absolute and relative frequencies, the chi-square test, and Fisher's exact test ($p < 0.05$).

Results:

There is no congruency between biological sex and gender schemas or between **combat individual sport** and collectivist/individualist profile among judo athletes in Santa Catarina, Brazil. In general, the subjects showed a predominant collectivist profile followed by the collectivist/individualist profile. In terms of gender schemas, most athletes classified themselves as having a masculine/feminine profile, followed by a masculine profile. With regard to the family subjective social status and the social position within the sports club, the judo athletes ranked themselves as upper and middle class. The female participants were more satisfied with their social status than the male athletes were.

Conclusions:

We recommend further research in other Brazilian states and other countries using the same variables and instruments as this study in order to enhance the psychosocial profile of judo athletes and propose new strategies for improved performance considering the idiocentric-allocentric profile, gender schemas of self-concept, and the subjective social status of athletes of both genders.

Key words:

combat sports • elite judo • social self-efficacy • sports psychology

Copyright:

© 2016 the Authors. Published by Archives of Budo

Conflict of interest:

The authors of this study declare that they have no conflicts of interest.

Ethical approval:

The study was approved by the Human Research Ethics Committee of Santa Catarina State University (Brazil) under protocol number 275381/2013.

Provenance & peer review:

Not commissioned; externally peer reviewed

Source of support:

Departmental sources

Author's address:

Elisa Pinheiro Ferrari, Santa Catarina State University, Paschoal Simone 358, 88080-350 Coqueiros, Florianópolis, Santa Catarina, Brazil; e-mail: elisaferrari_@hotmail.com

Idiocentric-allocentric profile – the level at which individuals are classified in a continuum between individualist and collectivist behaviour [16].

Gender-Schemas Self-Concept Inventory – the level at which individuals are classified in a continuum between femininity and masculinity according to gender schemas [18].

MacArthur Scale of Subjective Social Status – an instrument that measures how individuals perceive themselves in terms of subjective social status [19].

Subjective Social Status – self-perception of placement in the social hierarchy [19].

Idiocentrism – individuals who centre their attention on themselves. They are individualists [16].

Allocentrism – individuals who centre their lives on social relationships. They are collectivists [16].

Isocentrism – individuals with a balance between individualistic and collectivist behaviours [16].

Sports psychology – noun the scientific study of the mental state of sportspeople, looking at issues such as motivation, concentration, stress and self-confidence [28].

Sport psychology – is an interdisciplinary science that draws on knowledge from many related fields including biomechanics, physiology, kinesiology and psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors [29].

A Likert scale – is a psychometric scale commonly involved in research that employs questionnaires. It is the most widely used approach to scaling responses in survey research, such that the term (or more accurately the **Likert-type scale**) is often used interchangeably with *rating scale*, even though the two are not synonymous [30].

INTRODUCTION

Judo, known as the *gentle way*, has spread in and outside Japan and has developed new combat rules that modernized its practice [1]. Its main objectives are to strengthen the mind, body, and spirit in an integrated manner and to provide self-defence techniques [2]. With thousands of athletes and associations established in several countries, judo has become one of the most popular sports in the world, having a loyal and well-defined niche market. It is not restricted to men with physical strength, but extends its teachings to women, children, and the elderly [3].

Through trial and error and the application of the rules of combat, judo promotes changes in attitude, intensifies the power of imagination, increases attention and awareness, and strengthens determination [4]. These changes have instigated studies in sports psychology related to elite judo. The search for an ideal personality or a specific psychological profile that can achieve better athletic outcomes has also promoted research in this sport [5].

One of the aspects that is relevant to the psychological profile of athletes is the theory of individualism/collectivism, which states that both individualistic and collectivist cultures include idiocentric and allocentric individuals, i.e., individuals with individualistic and collectivist traits, respectively [6]. Therefore, when it comes to collective or **individual combat sports**, the dimensions of individualism/collectivism can also be applied. Would individualistic persons prefer individual sports without physical collaboration?

Another aspect of the psychological profile is gender-schemas of self-concept, which are defined as a cognitive, multidimensional, multifaceted, and flexible structure composed of an individual's self-representations based on the association, organization, and coordination of the components of cognitive schemas formed by masculine and feminine social gender schemes [7]. They have a similar outcome to that presented in the previous paragraph; therefore, it is assumed that individuals who play traditionally masculine sports would have predominantly masculine gender schemas of self-concept. Would individuals with masculine gender schemas prefer sports socially stereotyped as masculine such as judo?

Our results indicate that individuals with different identities and gender schemas play sports

socially perceived as masculine, feminine, or neutral, demonstrating that, in sports, gender stereotypes do not seem to influence the athlete's gender schema [5, 8]. However, it is noteworthy that gender schemas and idiocentric-allocentric profile are still surrounded by controversy. In this context, we emphasize the importance of developing a study on the factors/features that make up the judo athlete's idiocentric-allocentric profile and gender schemas of self-concept in order to test these popular assumptions about the relationship between psychological profile and sports preference. This study can also help to build an identity framework to contribute to the identification of psychological factors that influence sports performance [9].

In addition to the influence of the above psychological aspects, sports performance can also be related to the athlete's social status. According to Morris [10], social status can be divided into subjective social status, i.e., the individual's perceived social standing in his/her group, and social status, i.e., the consensus perception of the group about this individual. Moreover, social status is marked by the presence of social hierarchy that can be measured on a continuous analogue scale from "best" to "worst" with determinants, such as body size, age, performance, and the time in the club. When based on the perception of others, social status is related to the sense of social self-efficacy, responsible for promoting the satisfaction and positive support for social relationships [11, 12].

In view of these considerations, the aim of this study was to identify the idiocentric-allocentric profile, gender schemas of self-concept, and subjective social status of judo athletes in the state.

MATERIAL AND METHODS

Characterisation

This study is part of a larger research project entitled "Sports and artistic profile of athletes and dancers", duly submitted and approved by the Human Research Ethics Committee of Santa Catarina State University (UDESC) under protocol number 275381/2013. This institutional research project is focused on understanding the physical, social, and psychological characteristics of athletes and dancers of different modalities and styles, respectively. The cross-sectional study design aimed to describe the idiocentric-allocentric profile, gender schemas of self-concept, and subjective social status of judo athletes from Santa Catarina state, Brazil.

Participants

A total of 63 athletes took part in the study, including 35 men with mean age of 21.9 (± 6.8) years and 28 women with mean age of 19.5 (± 4.2) years – from 16 to 38 years old and living in different cities in the state of Santa Catarina, Brazil. These athletes were selected intentionally, and at the time, they were competing in major state and national official competitions (Tables 1, 2).

Table 1. General characteristics of the activity of the multi-annual training judo of respondents' athletes.

Variable	Male (n = 35)		Female (n = 28)	
	Mean	SD	Mean	SD
Time of systematic training (years)	9.31	6.86	7.82	4.02
Weekly frequency of training	4.69	0.96	4.75	1.23
Length of training (minutes)	108	1.07	195	1.37

Table 2. Sociodemographic characteristics of judo respondents' athletes.

Variable	Male (n = 35)		Female (n = 28)	
	n	%	n	%
Marital Status				
Without partner	29	82.9	22	78.6
With partner	6	17.1	6	21.4
Ethnicity				
African	4	11.4	5	17.9
European	19	54.3	15	53.6
Asian	2	5.7	1	3.6
Mixed (European/African)	9	25.7	5	17.9
Indigenous	1	2.9	2	7.1
Competition Level				
State	27	77.1	18	64.3
National	7	20.0	9	32.1
Socioeconomic Level				
Lower class	1	2.9	1	3.6
Middle class	32	91.4	27	96.4
Upper class	2	5.7	0	0.0

Instruments

Sociodemographic characteristics and sport practices

In order to characterize the participants, a questionnaire was prepared with the following information: name, age, sex, marital status, ethnicity [13], socioeconomic status (possessions and level of education of the head of the household) [14], and information relating to the practice of judo, such as systematic training time, weekly frequency, daily training time, and level of competition.

These variables were categorized as follows: city of origin, age (age in years), marital status (with/without partner), ethnicity (African, European, Asian, Mixed – European/African, Indigenous), and socioeconomic status divided into upper class (“class A” + “class B”), middle class (“class C”), and lower class (“class D” + “class E”).

For matters relating to the practice of judo, the variables were categorized as follows: contact time with judo (numeric), systematic practice time (numeric), weekly frequency of training (numeric), daily training time (numeric), highest level of competition (state, national, and international level).

Idiocentric-Allocentric Profile

The idiocentric-allocentric profile was evaluated using the *Idiocentric-Allocentric Profile Inventory* (I-A Profile), developed and validated by Melo et al. [15]. It consists of 27 items assessing behaviors and attitudes of athletes in relation to themselves and the team. The items are divided into three factors for idiocentrism (self-realization and competitiveness, hedonism, team emotional distance, and a second-order factor – idiocentrism level) and one factor for allocentrism (allocentrism level). The items of the factors are rated on a five-point Likert scale, where zero (0) indicates that the item does not apply to the respondent and four (4) indicates that the item fully applies to the respondent. The score for each factor was obtained by calculating the arithmetic mean.

The classification of athletes into typological groups is based on the scores of the factors ‘idiocentrism level’ (IL) and ‘allocentrism level’ (AL). Based on the placement of the athletes in the fields of the *Interactive Model* [16] and using the mathematical expression $\hat{\alpha} = +45^\circ - \text{arc tangent } \hat{\epsilon}$ (arctg – is the inversion of the tangent at angle)

(where: $\hat{\alpha}$ = angle and $\arctg \hat{\epsilon} = IL/AL$), it is possible to evaluate the deviation of each player in relation to the bisector. Mathematically, the bisector characterizes the proportionality between the levels of idiocentrism, allocentrism, and isocentrism, i.e., individualism, collectivism, and collectivism/individualism, respectively.

Gender Schemas

To assess gender schemas of self-concept, we used the *Gender Schemas of Self-Concept Inventory* developed and validated by Giavoni and Tamayo [17]. This instrument measures the composition of gender schemas that make up the masculine self-concept, consisting of 71 items that assess aspects of the male schema based on the egocentricity factors 'boldness' and 'rationality', and the feminine self-concept based on the factors 'integrity', 'sensuality', 'insecurity', 'emotionality', and 'sensitivity'. The items were ranked on a five-point Likert scale, in which zero (0) indicates that the item does not apply to the respondent and four (4) indicates that the item applies completely. The items that make up each of the factors are added individually, and the arithmetic mean for each factor is calculated.

Based on the factors of the male and female scales, it is possible to obtain two vectors, called masculine schema and feminine schema, which place individuals in the *Interactive Model* plane [16] and then individuals are classified into three typological gender groups, i.e., heteroschematic masculine, heteroschematic masculine, and isoschematic.

The interactive model has two fields called angle and distance. The angle determines the degree of proportionality between the constructs, allowing individuals to be categorized in typological groups. The distance verifies the level of development of each construct. Due to the high complexity of the *Interactive Model*, this study used only the angle to define the fields and classify individuals into typological groups. The following mathematical expressions were used:

$$\text{Male schema (MS)} = \sqrt{\Sigma (\text{Self-centeredness})^2 + (\text{Boldness})^2 + (\text{Rationality})^2}$$

$$\text{Female schema (FS)} = \sqrt{\Sigma (\text{Sensuality})^2 + (\text{Insecurity})^2 + (\text{Sensitivity})^2}$$

Each athlete was positioned in the fields of the *Interactive Model* according to their ordered pair

(MS, FS). From the position of athletes in the fields, it is possible to evaluate the deviation of each athlete in relation to the bisector using the mathematical expression $\hat{\alpha} = 45^\circ - \arctg \hat{\epsilon}$, (where: $\hat{\alpha}$ = angle and $\arctg \hat{\epsilon} = MS/FS$). Mathematically, the bisector characterizes proportion between the gender schemas.

Subjective Social Status

In order to evaluate the self-perceived status of athletes in view of the aspects of subjective social status of the family in the community and of the athlete at the sports club, this study used the *MacArthur Scale of Subjective Social Status – Youth Version* [18]. This scale consists of the image of the "social ladder". At the top of the ladder are the people with the highest marks, most respect, and highest social standing and at the bottom are the people with the worst grades, least respect, and lowest social position. The individual marks an "X" on one of the rungs, ranging from 1 to 10, corresponding to their sense of place in the ladder. To investigate the sports context, particularly judo, the ladder was adapted to portray the environment in the club and in common situations during sports practice. The subjects had to indicate where they felt they stood in the two different environments, then where they would like to be standing.

Data Collection Procedures

Prior to the data collection, the study objectives and relevance were presented to a representative of the Municipal Sports Department of the city of Chapecó (Brazil) in order to obtain official authorization. The data were collected from the men's and women's judo teams between August and November 2014.

The administration of the questionnaires lasted 30 to 40 minutes and took place at the training venues. The athletes responded privately and individually, but at the same time. They were instructed not to talk during the completion of the questionnaires. The researcher administered the questionnaires and answered any questions raised by the respondents. However, the minimum number of 30 athletes of each gender required for a comparative analysis was not obtained in Chapecó. Therefore, the researcher attended some of the state competitions and invited athletes from other regions of the state to participate.

RESULTS

More than half of the male (60%) and female (64.3%) athletes were classified as allocentric, followed by isocentric for male (31.4%) and female (28.6%) athletes (Table 3). More women described themselves as allocentric, i.e., having more collectivist traits than the men did, as was expected (Table 3).

Table 3. Idiocentric-allocentric profile of judo athletes according to sex.

I-A Profile	Male (n = 35)		Female (n = 28)	
	n	%	n	%
Idiocentric*	3	8.6	2	7.1
Isocentric**	11	31.4	8	28.6
Allocentric**	21	60.0	18	64.3

*individualist; **individualist/collectivist; ***collectivist

Both male (68.6%) and female (67.9%) athletes showed an isoschematic profile, i.e., symmetry between masculine and feminine schemas (Table 4). Regarding the other profiles, the male athletes showed slight predominance in the masculine heteroschematic category (28.6%) and the female athletes showed slight predominance in the feminine heteroschematic category (25.0%).

Table 4. Gender schemas of judo athletes according to sex.

Gender schemas	Male (n = 35)		Female (n = 28)	
	n	%	n	%
Heteroschematic feminine*	1	2.9	7	25.0
Isoschematic**	24	68.6	19	67.9
Heteroschematic masculine***	10	28.6	2	7.1

*feminine; **feminine/masculine; ***masculine

Regarding subjective social status, the results show that 51.4% of the male athletes and 67.9% of the female athletes perceived themselves as being upper class in relation to their family and community, and 48.6% of the male athletes and 53.6% of the female athletes perceived themselves as having a medium status within the team environment. The women perceived a higher status attributed to the sport both in society and in the team. However, more men (45.7%) than women (35.7%) had ambition to achieve a higher status in the team (data not shown in tables).

DISCUSSION

Although judo is considered an individual practice sport of physical contact against an opponent (see *Editorial note*), the athletes included in this study self-evaluated as having an allocentric profile, i.e., a preponderance of collectivist traits such as loyalty, submission, responsibility, and resignation [19]. According to Massa et al. [20], these traits are also true of judo athletes in their social context outside the sports environment.

Regarding the gender schemas of self-concept, the results of this study showed that most of the male and female athletes evaluated themselves as isoschematic. According to Gomes et al. [21], they display a proportionate development of masculine and feminine schemas, balancing the individualistic tendencies of power, endurance, and domination, which usually occurs in a judo match during attack and retreat.

The isoschematic traits found in the women, however, agree with the study developed by Die and Holte [22], which emphasized that female athletes are perceived as having both masculine (active and aggressive) and feminine (emotional and sensitive) characteristics. These characteristics may be associated with women's participation in judo, a sport that has maintained gender equality at all belt levels since its inception [9]. In addition, Menneesson [23], when evaluating female judo athletes, found that their behaviour was different from that of other girls during childhood and adolescence. They enjoyed competition and were "rowdy". During adolescence and adulthood, they adapted their behaviour to fit the standards of hegemonic femininity. Thus, despite being in a sport that values "masculine characteristics", these women strove to look feminine without being fragile or passive. Women who practice male-dominated sports are often labelled as masculine or tomboys. In reality, femininity remains, but so-called masculine qualities are added [24].

It is clear that the lack of information about existing competitive trends in men and women, specifically in judo [9], interferes with the development of a more appropriate training program for each of the sexes considering their gender profile. In addition to training, the success of a talented individual depends on their commitment, motivation, and passion for their area of expertise, as well as the support of various segments of society such

as family, good mentors and teachers, and good coaches in the case of sport [25].

With regard to the subjective social status, our findings showed that the athletes, especially the female athletes, perceived themselves as having a high status in their family and community. When asked about their status within their sports club, the athletes ranked themselves as medium level, with male athletes desired a higher position. These findings agree with Holt and Morley [26], who observed that sporting success is associated with psychosocial factors during childhood and highlighted the strong influence of parents, siblings, schools, and sporting events on the child's choice of sport.

From another point of view, these findings also corroborate Magee and Galinski's [27] perception when they describe the sports environment as being permeated by constant relations of hierarchy and leadership, which leads the athletes to always seek to be the best on the pitch and gain recognition and status in other social environments that surround them.

Although this is a pioneer study in the field of judo, it has some limitations. The data collection was carried out during training and competitions, therefore some of the questionnaires were not returned, thus reducing the number of subjects in the sample. In addition, the cross-sectional design

does not allow the researchers to investigate some of the information further.

CONCLUSIONS

The results of the present study showed that most of the male and female judo athletes presented an allocentric profile. Although judo is considered an individual practice sport of physical contact against an opponent (see *Editorial note*), its practice requires an individualistic/collectivist profile in which athletes to do their personal best while also showing concern for the team. Both male and female athletes presented a balanced profile between masculine and feminine traits, indicating that women can practice sports considered 'masculine' and retain their femininity. With regard to the subjective social status, it can be concluded that female judo athletes have a high self-perceived social status; however, male participants are more determined to achieve a higher social status.

In view of these considerations, we recommend further research in other Brazilian states and other countries using the same variables and instruments as this study in order to enhance the psychosocial profile of judo athletes and propose new strategies for improved performance considering the idiocentric-allocentric profile, gender schemas of self-concept, and the subjective social status of athletes of both genders.

REFERENCES

- Carazato JG, Cabrita H, Castropil W. Repercussão no aparelho locomotor da prática do judô de alto nível. *Rev Bras Ortop* 1996; 3(12): 957-968 [in Portuguese]
- Suzuki E. O pai da educação integral e o universo do Judô. São Paulo: Editora do Escritor; 1986 [in Portuguese]
- Amtmann J, Cotton A. Strength and conditioning for judo. *Strength Cond J* 2005; 27: 26-31
- Trusz RA, Dell'Aglio DD. A prática do judô e o desenvolvimento moral de crianças. *Rev Bras Psicol Esporte* 2010; 3(2): 117-135 [in Portuguese]
- Melo GF de, Giavoni A. O perfil psicológico de atletas baseado na teoria do individualismo e do coletivismo. *Rev Bras Psicol Esporte* 2010; 3(4): 2-18 [in Portuguese]
- Triandis HC. *Individualism and collectivism*. Boulder: West View Press; 1995
- Giavoni A, Tamayo Á. Inventário feminino dos esquemas de gênero do autoconceito (IFEGA). *Estud Psicol* 2005; 10(1): 25-34 [in Portuguese]
- Cardoso FL, Sacomori C. Identidade de Gênero/Sexo de Atletas e Sedentários. *Rev Bras Ciênc Esporte* 2012; 34(4): 925-941 [in Portuguese]
- Serassuelo Jr H, Oliveira SRS, Simões AC. Avaliação das Tendências Competitivas de Atletas de Judô: uma análise entre gêneros. *Rev Educ Fis UEM* 2009; 20(4): 519-528 [in Portuguese]
- Morris T. Psychological characteristics and talent identification in soccer. *J Sports Sci* 2000; 18(9): 715-726
- Bandura A. Human agency in social cognitive theory. *Am Psychol* 1989; 44(9): 1175-1184
- Medeiros PC, Loureiro SR, Linhares MBM et al. A autoeficácia e os aspectos comportamentais de crianças com dificuldade de aprendizagem. *Psicol Refl Crít* 2000; 13(3): 327-336 [in Portuguese]
- Instituto Brasileiro de Geografia e Estatística. Características étnico-raciais da população: um estudo das categorias de classificação de cor ou raça (accessed 2016 Feb 20). Available from: URL: <http://www.ibge.gov.br> [in Portuguese]
- Associação Brasileira de Empresas de Pesquisa. Critério de classificação econômica Brasil (accessed 2016 Feb 20). Available from: URL: <http://www.abep.org> [in Portuguese]
- Melo GF, Giavoni A. Perfil psicológico de atletas brasileiros baseado na teoria do Individualismo-Coletivismo e na metodologia do Modelo Interativo. *Rev Bras Psicol Esporte* 2010; 3(4): 2-18 [in Portuguese]
- Giavoni A, Tamayo Á. The psychological synthesis evaluated by the Interactive Model. *Psicol Refl Crít* 2010; 23(3): 593-601 [in Portuguese]
- Giavoni A, Tamayo Á. Inventário masculino dos esquemas de gênero do autoconceito (IMEGA). *Psic Teor Pesq* 2003; 19(3): 249-259 [in Portuguese]

18. Goodman E, Adler NE, Kawachi I et al. Adolescents' perceptions of social status: development and evaluation of a new indicator. *Pediatrics* 2001; 108(2): 1-8
19. Triandis H. The self and social behavior and differing cultural contexts. *Psychol Rev* 1989; 96(3): 506-520
20. Massa M, Uezu R, Bohme MTS. Judocas olímpicos brasileiros: fatores de apoio psicossocial para o desenvolvimento do talento esportivo. *Rev Bras Educ Fis Esporte* 2010; 24(4): 471-481 [in Portuguese]
21. Gomes AS, Sotero RC, Giavoni A. Avaliação da composição corporal e dos níveis de aptidão física de atletas de futsal classificados segundo a tipologia dos esquemas de gênero. *Rev Bras Med Esporte* 2011; 17(3): 156-160 [in Portuguese]
22. Die AH, Holt R. Perceptions of the typical female, male, female athlete, and male athlete. *Int J Sport Psychol* 1989; 20(2): 135-146
23. Mennesson C. Hard woman and 'soft' women: The social construction of identities among female boxers. *Int Rev Sociol Sport* 2000; 35(1): 21-33
24. Ferretti MA de C, Knijnik JD. Mulheres podem praticar lutas? Um estudo sobre as representações sociais de lutadoras universitárias. *Movimento* 2007; 13(1): 57-80 [in Portuguese]
25. Côté J. The Influence of the Family in the Development of Talent in Sport. *Sport Psychol* 1999; 13: 395-417
26. Holt NL, Morley D. Gender differences in psychosocial factors associated with athletic success during childhood. *Sport Psychol* 2004; 18(2): 138-153
27. Magee JC, Galinsky AD. Social hierarchy: The self-reinforcing nature of power and status. *Acad Manag Ann* 2008; 2: 351-398
28. Dictionary of Sport and Exercise Science. Over 5,000 Terms Clearly Defined. London: A & B Black; 2006
29. Weinberg RS, Gould D. Foundations of Sport and Exercise Psychology. Champaign: Human Kinetics; 2010
30. Likert R. A Technique for the Measurement of Attitudes. *Arch Psychol* 1932; 140: 1-55

EDITORIAL NOTE

Editors of the *Archives of Budo*, as many professionals in sport science (representing not only the science of martial arts) do not share the authors point of views that “judo is considered an individual sport” in manuscript. After editors remarks authors introduced a new category “**combat individual sport**”. Judo according theory of combat sport [31] qualifies for the **combat sports** – the group of sports disciplines, in which the gist of the competition is the direct clash of two competing athletes. They are affiliated to the national and international sports organizations in order to carry out official competition, classification, etc. [31, p. 18].

Similarly, define *combat sports* Sterkowicz-Przybycień and Franchini [32] – competitive contact sports where two athletes fight against each other under certain codified rules. In our study we focused on the Olympic combat sports; Pion et al. [33] – competition based martial arts. The combat sports investigated in this article are karate, judo and taekwondo; Biernat and Boguszewski [34] – are a competitive contact sports with one-on-one combat. Determining the winner depends on the particular contest's rules. In many combat sports, a contestant wins by scoring more points than the opponent or by disabling opponent.

With these definitions corresponds a brief definition of the *Dictionary of Sport and Exercise Science* [28], which for obvious reasons is not relativized to the content of the article: *combat sport* – noun a sport in which one person fights another, e.g. wrestling, boxing and the martial arts. The same *Dictionary* defines **martial arts** as – plural noun any of various systems of combat and self-defence, e.g. judo or karate, developed especially in Japan and Korea and now usually practised as a sport [28].

The most general relations between combat sports and martial arts defines theory of combat sport [31]: every combat sport is martial arts but not vice versa.

In one of the newest classification Naglak distinguished five categories of sports motor, cognitive, or perceptive characteristics: (1) games (cognitive, perceptive); (2) games with a ball or a puck, etc. (cognitive, perceptive, motor); (3) shows (motor, cognitive); (4) direct confrontation (perceptive, cognitive, motor); (5) races (motor, perceptive, cognitive) [35]. **Combat sports** fall within the category of direct confrontation [35].

Relating to these methodological findings in confrontation with the views of the authors distinguish the category of individual sports is justified in putting the principle of rhetorical questions: whether relay race 4 x of 100 m is an individual sport, since the run on 100 m is undoubtedly individual sport; or if playing doubles in tennis, badminton, dance sport, figure skating (pairs skating) etc. are individual sports?

RECOMMENDED REFERENCES

1. Kalina RM. Teoria sportów walki. Warszawa: COS; 2000 [in Polish]
2. Sterkowicz-Przybycień K, Franchini E. Demographic profile of combat sports athletes: A comparative analysis between genders and competitive achievement in London 2012. Arch Budo 2013; 2: 149-159
3. Pion J, Fransen J, Lenoir M et al. The value of non-sport-specific characteristics for talent orientation in young male judo, karate and taekwondo athletes. Arch Budo 2014; 10: 147-154
4. Biernat E, Boguszewski D. The level of physical activity of the working inhabitants of Warsaw practising martial arts and combat sports. Arch Budo 2015; 11: 69-77
5. Naglak Z. Kształcenie gracza na podstawowym poziomie. Wrocław: University School of Physical Education; 2010 [in Polish]

Cite this article as: Cardoso FL, Ferrari EP, Pereira RG et al. Idiocentric and allocentric profile, gender schemas of self-concept, and subjective social status of judo athletes. Arch Budo 2016; 12: 293-300