ABSTRACTS BOOK

IMACSSS
Instituto Politécnico de Viseu
Escola Superior de Educação de Viseu
Viseu 2019
8th IMACSSS Conference 2019

Scientific Congress on Martial Arts and Combat Sports

10th - 12th October 2019
Polytechnic Institute of Viseu
Portugal

Information and Registrations
www.esev.ipv.pt/IMACSSS2019

Organization
Sport Sciences and Mobility Department
School of Education - Polytechnic Institute of Viseu

International Patronage
IMACSSS – International Martial Arts and Combat Sports Scientific Society
(www.imacsss.com)

National Patronage
RED5PP – Portuguese Network of Public Polytechnic Universities with Sport Studies
(http://cooperaçãoesportivaesoports.com/

Sponsors

[Logos of sponsors]
EDITORIAL


The central issue of the Congress is the scientific interpretation of actions in broader contexts and cultures such as Martial Arts (MA), Combat Sports (CS) or Self-Defence (SD), in relation to objectives usually associated with human development (e.g., health, well-being, education and culture).


The congress organizing committee believes that this 2019 initiative will provide a valuable opportunity to promote, enlarge and strengthen the scientific community gathered around martial arts and combat sports (MA&CS).

Education and training of MA&CS Teachers and Instructors is a clearly medium to long-term objective across the world, with a growing presence in the environments of physical activity (health, well-being and fitness), sports (from basics of education to sport performance of different levels), school physical education (given the eclectic, inclusive and multilateral context of this school subject) and culture construction (practices as non-material and intangible heritages, folklore and multicultural natures). This trajectory, however, should be followed in coherent connection with research developed and practice in scientific centers.

In this way, we thank you all cultural and scientific organizations, all interested researchers, educators and practitioners, participating in the event as speakers and poster presenters, as all committed communities of technicians and advanced practitioners of MA&CS to make this network.

Welcome to Viseu, Portugal!

www.esev.ipv.pt/IMACSSS2019

Abel Figueiredo, Ph.D.
IMACSSS 2019 Scientific Committee Chair
abel.figueiredo@esev.ipv.pt
IMACSSS 2019 SCIENTIFIC CONGRESS ON MARTIAL ARTS AND COMBAT SPORTS
Viseu – Portugal
10th-12th October 2019

Objectives
1. To gather researchers and scholars to promote debate around the study object of the contexts of ‘martial arts’, ‘combat sports’ or ‘self-defence’: human fight motricity;
2. To reflect on on-going international research work on this areas;
3. To promote the dissemination of projects in the fields concerned;
4. To call the attention to the need of developing different scientific approaches.

Main Target Groups
Researchers in the field of martial arts/combat sports (MA&CS);
Teaching and training participants in the area of MA&CS;
Higher education students and advanced level practitioners;
Heads of Organisations promoting MA&CS.

Organization
IMACSSS – International Martial Arts and Combat Sports Scientific Society
REDESPP – Portuguese Network of Public Polytechnic Universities with Sport Studies
Sport Sciences and Motricity Dep. - School of Education – Polytec. Inst of Viseu

Organizing Committee
João Paulo Balula, Ph.D. – President of the School of Education – Viseu
Antonino Pereira, Ph.D. – Coordinator of Sport Sciences and Motricity Department
António Azevedo, Ph.D. – Coordinator of Human Motricity Area
Abel Figueiredo, Ph.D. – Coordinator of Sport Sciences Study Program
Francisco Mendes, Ph.D., João Esteves, Ph.D., Paulo Eira, Ph.D., Francisco Gonçalves, Ph.D., Aristides Rodrigues, Ph.D., Carlos Vasconcelos, PhD., Patrícia Sousa, MSc., Ricardo Oliveira, MSc.

Executive Committee
Coordination: Abel Figueiredo (Portugal), Antonio Brito (Portugal) and Carlos Gutierrez (Spain).
Adjunct Coordination: Vitor Rosa (Portugal) and Bruno Rosa (Portugal).
Assistants: Students of Bachelor in Sport and Physical Activity.
Registration and Financial Management: Silvia Vasconcelos (ESEV).
Honourable Committee
President of the Portuguese Institute of Sport and Youth (IPDJ)
President of Viseu City Hall Municipality
President of the Olympic Committee of Portugal (COP)
President of the Paralympic Committee of Portugal (CPP)
President of the Polytechnic Institute of Viseu
President of School of Education of Viseu
President of REDESPP – Portuguese Network of Schools with Sport Studies in Polytechnic Public System Universities
Deans of the Physical Education and Sport Faculties and Higher Education Schools
President of the Portuguese Confederation of Coaches
Presidents of Portuguese Sport Federations (MA&CS) and Coach Associations (MA&CS)
President of IMACSSS – International Martial Arts and Combat Sports Scientific Society
President of REDESPP – PT Network of Public Polytechnic Universities with Sport Studies

Scientific Committee
Ágata Cristina Aranha, Ph.D (University of Trás-os-Montes - Portugal)
Ana Rosa Jaqueira, Ph.D. (University of Coimbra – Portugal)
António Quaresma, Ph.D. (University Lusófona – Portugal)
Cristiano Roque, Ph.D. (University of São Paulo – Brasil)
David Brown (Cardiff University, United Kingdom)
Eric Margnes, Ph.D. (University of Pau et des Pays de l’Adour – France)
Ewa Polak (CS & MA, Kinesiology - Poland)
Fumiaki Shishida, Ph.D. (Waseda University – Japan)
Fuminori Nakiri (Japanese Academy of Budo - Japan)
George Jennings Ph.D. (Cardiff University - UK)
Jikkemien Vertonghen, Ph.D. (Vrije Universiteit Brussel - Belgium)
John A. Johnson, Ph.D. (Keimyung University – Korea)
Jose Bragada, Ph.D. (Polytechnic Institute of Bragança – Portugal)
Kai Filipiak, Ph.D. (Leipzig University – Germany)
Luis Fernandes Monteiro, Ph.D. (University Lusófona - Portugal)
Luis Santos Rodríguez, Ph.D. (Universidad de León – Spain)
Marc Theeboom, Ph.D. (Vrije Universiteit Brussel - Belgium)
Marco Branco, Ph.D. (Polytechnic Institute of Santarém – Portugal)
Michal Vit, Ph.D. (Masaryk University - Czech Republic)
Mikel Pérez Gutierrez, Ph.D. (University of Cantabria - Spain)
Oscar Martínez De Quel Pérez, Ph.D. (Polytechnic University of Madrid - Spain)
Pablo Antonio Valdés Badilla Ph.D. (Universidad Autónoma De Chile - Chile)
Paulo Coelho Araújo, Ph.D. (University of Coimbra – Portugal)
Pedro Magalhães, Ph.D. (Polytechnic Institute of Bragança – Portugal)
Raquel Escobar Molina, Ph.D. (University of Granada – Spain)
Raúl Sánchez García, Ph.D. (Polytechnic University of Madrid - Spain)
Roberto Ruiz Barquín, Ph.D. (Autonomous University of Madrid - Spain)
Sergio Raimondo. Ph. D. (University of Cassino – Italy)
Thomas Green, Ph.D. (Texas A & M University – USA)
Vitor Rosa, Ph.D. (CeiED, University Lusófona – Portugal)
Zdenko Reguli, Ph.D. (Masaryk University - Czech Republic)
Zhang Guodong (Southwest University - China)

**Editorial Patronage**
Revista de Artes Marciales Asiáticas (Spain) - http://revpubli.unileon.es/index.php/artesmarciales/index

**Research Units Patronage – Portugal:**
CI&DETS – Centre for the Study of Education, Technology and Health.
CONGRESS PROGRAM INTRODUCTION

The Congress will be divided into two main fields: (1) global approach (2) multidimensional.

The global approach on the first day will mainly focus on two sections:
a) MA&CS object of study, systematic, institutions and research methodologies;
b) Pedagogy and Didactics including Instructors and Coach Education processes in MA&CS.

The multidimensional field will be based on the analysis of martial arts and combat sports according to five dimensions as seven sections:
i) Physical dimension – physiological conditioning factors (CF) in physical training;
ii) Technical dimension – biomechanical CF in technical training;
iii) Tactical dimension – bioinformational CF in tactical training;
iv) Psychological dimension – affective and emotional CF in psychological training, and;
v) Socio-cultural and philosophical dimension – CF of norms, values and symbols.

The Congress format will be based on three to five minutes’ poster presentations with final group discussion, 20 minutes oral communications, and 60 to 90 minutes roundtable panels with four-five specialists. The latter will have a 10 minutes’ central presentation and three to five minutes presentations on the subject, followed by a discussion centered on questions and answers from the audience and will conclude with final comments by the roundtable panel members.

The Congress program will start with the global approach, to be developed during the first day, followed by more specific interpretative analyses within the above-mentioned dimensions. The Closing Session will summarize all relevant aspects discussed.
CONTENTS

EDITORIAL ................................................................. 3

Mikel PÉREZ-GUTIÉRREZ; Carlos COBO-CORRALES ......................... 10
Martial Arts and Combat Sports Theses and Dissertations indexed in BASE database: a bibliometric approach

António VencesBrito; Mário A. Rodrigues-Ferreira; Vitor Milheiro; Marco Branco; Cristina Mercê; Ana Paula Seabra; David Catela ........................ 11
Metabolic and energetics characterization and gender comparation in prepubertal karate practitioners

Kentaro TAI, Shutaro JINNO, Namika MOTOSHIMA, Toshiyuki MIYARA... 12
A Study of a Karate Trial Teaching Class in a Teacher Training Course –Based on Students' Formative Evaluation

John A. JOHNSON; Wojciech J. CYNARSKI; Sunjang LEE .................... 13
ITF Taekwon-Do pedagogy in North Korea: a case study

Rodrigo Batalha SILVA; Alexandre ANDRADE; Guilherme Guimarães BEVILACQUA; Adriano SCHLÖSSER, Miguel Alencar FLORES JUNIOR; Bianca dos Santos SEVERINO; Maria Eduarda Soares RODRIGUES ...... 14
Mood states and self-rated health of Brazilian jiu-jitsu fighters in competition

Guilherme Guimarães BEVILACQUA; Rodrigo Batalha SILVA; Verônica Maria CLAUDINO; Bianca dos Santos SEVERINO; Maria Eduarda Soares RODRIGUES; Alexandre ANDRADE........................................ 15
Self-rated sleep quality and mood states of Brazilian fighters

Ting Xu, Guodong Zhang ............................................................ 16
Research Progress of Restraining Campus Bullying by Martial Arts Training

Bruno AVELAR-ROSA; Víctor LÓPEZ-ROS ........................................ 17
What happens during a teaching-learning process of Martial Arts and Combat Sports with novice – A case-study focused on the joint activity organization analysis

Luís Monteiro; Jorge Gonçalves; Luis Chambel ................................. 18
Evolution of the Temporal Structure of World High Competition Judo Combat (2013 a 2017)

Jožef ŠIMENKO ................................................................. 19
The benefits of Functional Movement Screen in judo

Mohamad Nizam Mohamed SHAPIE; Diyanna Athirah JAMSARI; Afrina MOHD RAZI; Jamiaton KUSRIN; Wahidah TUMIJAN ................................. 20
Comparison of Action Performances and Outcome Between Winners and Losers in Young Female Silat Tempur Matches

J An PAWISTA; Mohamad Nizam Mohamed SHAPIE ............................ 21
Activity Profile Between Winners and Losers Among Female Exponents in International Silat Olahraga Competition
THE EFFECTS OF A 6-WEEK PLYOMETRIC TRAINING ON MUSCULAR STRENGTH PERFORMANCE IN SILAT EXPONENTS.

The gist and significance of wrist work in the old Polish fencing sabre based on selected techniques of cuts and thrusts.

Motivation and MA&CS participation: Study protocol

Psychological characteristics of developing excellence in mixed martial arts athletes

Empathy in children practicing judo compared to their non-practicing peers

Old polish warrior's path - psychophysical and martial preparation of a young nobleman in modern Poland

“Deep Cover”: Identities and Ethics in Martial Arts Fieldwork

Sociological analysis of three dual combat practices in Portugal: the case study of aikido, judo and wrestling

The sportivization process of a martial art: the karate

The role of pre-reflexive processes in learning how to fight: contributions from phenomenology

From phenomenology for a theory of Corporal Combat and Martial Arts

Karate's ambiguity: traditional martial art or modern combat sport

Remarks on philosophy of the *Idokan karate*
Mikel PÉREZ-GUTIÉRREZ1; Carlos COBO-CORRALES2

1 University of Cantabria (Spain)
2 University of Cantabria (Spain)

Martial Arts and Combat Sports Theses and Dissertations indexed in BASE database: a bibliometric approach

Short Abstract

Doctoral theses, as the first valuable document in a researcher’s career, are considered as grey literature due to they are not widely distributed but are considered as an important source of information. The aim of this work was to perform a bibliometric analysis of martial arts and combat sports doctoral or postdoctoral dissertations published in the BASE database. After preparing a comprehensive MA&CS terms list and search strings, they were entered manually. Duplicate references were removed, and obtained documents were filtered for meeting inclusion criteria. Then, results were exported to Endnote X6 for classification and to Excel 2016 for bibliometrics. A total of 457 theses relating to MA&CS, published from 1951 to 2019, were obtained. The last analyzed decade collected 64.55% of total documents and judo was the most analyzed MA&CS with 90 documents. MA&CS theses and dissertations are an important source of information for scholars and academics, especially when the amount of them has considerably increased during the last decade at the international level.

Keywords: Martial Arts; Scientific Production; Theses; Bibliometrics.
Metabolic and energetics characterization and gender comparison in prepubertal karate practitioners

Short Abstract

Every day increases the number of children practicing karate, so it is necessary to provide correct information’s to the karate masters/coaches about these specific population, so they can properly apply karate training without causing future harm to practitioners, but, on the contrary, contributing to its harmonious development. The study was done with twenty-one prepubertal karate practitioners, male and female, and they were analyzed on their maturational development, metabolic and energetic behavior in an incremental test until exhaustion. Only the energetic variables present significant differences between gender, so it seems that the karate practice have a similar metabolic impact in the development of the prepubertal karate practitioners of both genders.

Keywords: Children; Metabolism; Energetics; Karate; Combat Sports.
A Study of a Karate Trial Teaching Class in a Teacher Training Course – Based on Students’ Formative Evaluation

Short Abstract

The purpose of this study was to examine the effectiveness of a Karate trial teaching class in an initial teacher training course, through students’ formative evaluation. It involved two case studies of trial teaching classes of Karate and that of two other activities, taught by the students of an initial teacher training course. The results were assessed using the Students’ Formative Evaluation of Physical Education (P.E.) Classes scale developed by Takahashi et al. (1994). Results of the study indicate that the students’ formative evaluation shows were significantly different ("new discovery": $p<.05$) and show a trend toward statistical significance (‘Skill growth’: $p<.10$, ‘Fun Exercise’: $p<.10$, ‘Learning friendly’: $p<.10$) based on the classes provided by Karate and other teaching materials. This implies that Karate might have different effects on the learning of students compared to other activities as teaching materials in school-level physical education.

Keywords: school physical education, pedagogy of physical education, trial teaching class, student’s formative evaluation, teacher’s training course
ITF Taekwon-Do pedagogy in North Korea: a case study

Short Abstract

Background. Despite the style of Taekwon-Do taught by the International Taekwon-Do Federation (ITF) being founded in the Republic of Korea (ROK; South Korea), it is known predominately as “North Korean Taekwon-Do.” Problem and Aim. Taekwon-Do was introduced to the People’s Democratic Republic of Korea (DPRK; North Korea) in 1980, but since no studies have reported how it is practiced in that country due to the DPRK government’s restricting access to its populace. This research aims to begin establishing if there are differences in pedagogical purpose and praxis in DPRK Taekwon-Do. Methodology. An internet search for individuals who traveled to the DPRK to practice Taekwon-Do specifically was conducted. A systematic literature of ITF pedagogical materials was performed, and a multipurpose, qualitative questionnaire was implemented. Out of the seven individuals who were identified and contacted, two agreed to participate in the current study; however, one of those two were disqualified due to incorrectly completing the questionnaire. A descriptive, non-experimental case study of one subject (Singaporean female aged 36 yr.) was then conducted. Qualitative analysis of the data resulting from the questionnaire and follow-up interviews were performed. Results. All five areas of the ITF’s curriculum (i.e., fundamental techniques, tul [forms], sparring, dallyon [forging or conditioning of the body], and self-defense) and the three levels of Taekwon-do’s pedagogy (i.e., musul [martial technique], muyae [martial artistry], and mudo [martial way]) were found in DPRK Taekwon-Do. Discussion and Conclusions. Despite the severe limitations of being unable to interview DPRK Taekwon-Do practitioners directly and the smallest small sample group possible, we found that DPRK instructors teach all aspects of General Choi’s Composition of Taekwon-Do and the stratified Taekwon-Do pedagogy theory were found in our subject’s practice in the DPRK.

Keywords: musul (martial technique); muyae (martial artistry); mudo (martial way); General Choi Hong Hi; International Taekwon-Do Federation (ITF); behavioral-rational curriculum design
Mood states and self-rated health of Brazilian jiu-jitsu fighters in competition

Short Abstract

Brazilian Jiu-Jitsu (BJJ) athletes are subjected to a large and intensive training load that may cause injuries. These injuries can be detrimental to the physical and mental health of these athletes. In this regard, the aim of this study was to compare the self-reported health and mood states of BJJ athletes. Twenty-three BJJ athletes participated in the study. A questionnaire was used for general characterization of the athletes, which included the self-rated health question, and the Brunel Mood Scale – BRUMS were used. The mood profile was similar to the Iceberg profile. Athletes with regular health had lower vigor than athletes with excellent vigor. Lower vigor in athletes who reported regular health may be related to concern about injury. Specific strength training and careful execution of the technique should be emphasized in training.

Keywords: sport psychology; combat sports; injury
Self-rated sleep quality and mood states of Brazilian fighters

Short Abstract
Sleep has a direct relationship with mood. In this context, the aim of this study was to analyze the relationship between sleep quality and mood of combat sport athletes. A total of 188 elite male combat sports athletes participated in the study. Athletes who reported good sleep have greater vigor during competition than athletes with regular sleep and the mood profile was similar to the iceberg profile. In conclusion, there are relationships between sleep quality and mood of combat sport athletes, and athletes with good sleep quality present a mood profile nearest to the ideal for the best performance.

Keywords: sport psychology; combat sports; sleep
Research Progress of Restraining Campus Bullying by Martial Arts Training

Short Abstract

The research method used was a literary review of the existing research related to practice martial arts and campus bullying. Existing research suggests that martial arts training can reduce bullying behaviors by improving individual self-control and self-esteem, reducing hostility and strengthening interpersonal communicative ability. Current research also emphasizes the efficacy of those martial arts activities that pay attention to participants’ moral education or norms of proper social behavior in order to improve physical cognition and lead to restraining individual bullying behavior. Future research should focus on cross-cultural factors and local situations, combine quantitative and qualitative research methods, and explore the internal mechanism of martial arts training to curb campus bullying, so as to explore new ways in which martial activity can promote individual psychological adjustment and to positively address problem behavior.

Keywords: Martial arts training; campus bullying; internal mechanism; psychological analysis.
What happens during a teaching-learning process of Martial Arts and Combat Sports with novice – A case-study focused on the joint activity organization analysis

Short Abstract

Semiotic devices are relevant tools to study the teaching-learning process according to the constructivist perspective, which supports several of the game-center approach models. Even not being included in the generality of these models, martial arts and combat sports have a clear potential to be developed according to these models. Following this, it was settled a didactic sequence based on the fighting knowledge development through the learning of a striking and a throwing skill. A pragmatic discourse analysis was made and specific forms of joint activity organization, called segments of interactivity, were identified. Inside these segments, several patterns were registered considering its main function and format of interaction. The segments of interactivity of activity organization and guided practice constituted both the bigger part of the time and total number of segments, which suggest that the learning processes should be understood inside of their scope. This way, looking for the activity organization, the predominance of the patterns related with “execution” evolve according with the appropriation of the contents, while the “function” patterns seems to be more relevant when it is proposed a new or more complex task. By the other hand, the guided practice segments results remark the importance of the one-to-one interactions between teacher and apprentice within the whole classes situation. These results show the singularity of every teaching-learning process in terms of the progressive transfer of control and responsibility from the teacher to the apprentice and the simultaneous establishment of an increasingly rich network of shared meanings between these agents.

Keywords: Constructivism, Interactivity, Activity organization, Guided practice, Fighting knowledge.
Evolution of the Temporal Structure of World High Competition Judo Combat (2013 a 2017)

Short Abstract

Judo is a sport that is constantly changing and evolving. Many changes occurred between 2013 and 2017, to promote "positive" actions / score, instead of "negative" actions / penalties. This study analyzed the evolution of the temporal structure of the combat, the total time (TTC), namely within the time of activity, the time without grip (TCWG) and with grip (TCG), the pause time (TP), the percentage of combat in tachi-waza and combat in the ne-waza, and the number of actions. Data were analyzed in the World Championships 2013, 2014, 2015, 2017 and 2016 Olympic Games in a total of 3084 male and female combats, comparing the total duration of combat, activity times (TA) and pause times (TP), as well as the frequency of actions, between all competitions, considering weight, gender and competition phases (qualifiers, quarterfinals, recaps, semi-finals, bronze and finals). The evolution of the combat of Judo between 2013 and 2017 presents some changes. In relation to the TTC, the average was of 275 s with an increase of about 3.6% of the TTC. The structure of the combat was: 25% in the TP and the average of each TP of 8.9 s; TAG, 36% and the average of each TAG of 9.6 s; TAWG, 25% and 7.3 s of each action; in the ne-waza, 15% and the average of every action 7.7 s. With the changes of the rules in 2017, we see a Golden Point increase of 25% in the total of the combats; in relation to the combat phase, the finals had an increase of 50%. There was also a 15% increase in the number of shares in the final stages. There was some variation of the time structure of the combat, namely in the total time of the fighting and Golden Point, as a consequence of the change of the Referee rules.

Keywords: Judo; time structure of combat; effort-pause ratio; total time; pause time; number of actions.
The benefits of Functional Movement Screen in judo

Short Abstract

With the development of screening methods, simple screening tools could commonly be used to assess movement quality in real-world conditions. One of those methods is the functional movement screen (FMS), that was developed to help determine the fundamental movement patterns of an individual. FMS test was administered to 9 elite judokas aged 22 ± 4.24 years, height 176.44 ± 7.44 and weight 79.44 ± 15.92 kg. The overall FMS score was 17.56 ± 1.59. No significant asymmetries were noted in the bilateral test. The lowest score was achieved in shoulder mobility 1.89 ± 0.6 which represent an issue that needs to be addressed to prevent the occurrence of injuries. Overall the FMS testing could be a beneficial tool to strength and conditioning coaches in judo, especially in the preseason to assess the functional movement status of judo athletes and to address any issues that could be identified. It represents a fast and affordable screening tool, but it needs to be administered by a qualified assessor. The data of this study could serve as a reference score to other FMS research in judo or other combat sports or martial arts.

Keywords: FMS, asymmetries, prevention, screening, test.
Comparison of Action Performances and Outcome Between Winners and Losers in Young Female Silat Tempur Matches

Short Abstract
Silat tempur is a combat sports competition introduced to provide early preparation for the beginners to master the basic techniques of silat before they shifted to silat olahraga. The purpose of the current study is to compare the performance of actions and outcome during action time between winners and losers in national silat tempur competition. The notational analysis focused on five different types of action categories in silat tempur; kick, punch, topple, block and catch. The action categories are divided into three outcomes; Hit Target (HT), Hit Elsewhere (HE) and Missing Opponent (MO). The researchers observed the silat matches (each with three round games) between winners and losers among young female exponents (aged 14 to 17-year-old). The observations were made through series of videos with a total of 19 matches (N = 19). Matched Paired T-test was used to analyse each action performances and outcome between winners and losers. Current study shows the winners performed more actions than the losers (p < 0.05). The winners frequently used more kick to attack their opponents (p < 0.05). However, there were similar performance between winners and losers in punch, block, topple and catch (all actions, p > 0.05). The outcome shows the winners performed more successful actions (HT) than the losers (p < 0.05), particularly on kick and block (both actions, p < 0.05). The losers significantly miss (MO) more catch actions than winners (p < 0.05). The author concluded that, kick was the main action that both exponents used during silat matches with the winners performed more successful actions than the losers.

Keywords: Martial Arts; Combat Sports; Malay Sports; Young Exponents; Gayung
Activity Profile Between Winners and Losers Among Female Exponents in International Silat Olahraga Competition

Short Abstract

Aim: The purpose of this study is to determine the details of activity that occurred during the match time between winners and losers among female exponents on SEA Games 2017 Silat Olahraga competition. Methodology: Twenty female exponents from ten matches (N = 10) of silat olahraga on SEA Games 2017 was selected in this study. The notational analysis focused on fourteen different types of motion categories in Silat Olahraga, which are kick, punch, sweep, topple, block, catch, evade/dodge, block and kick, block and punch, block and sweep, fake kick, fake punch, self-release and others. The motion categories were divided into three outcomes, which were Hit Target (HT), Hit Elsewhere (HE) and Missing Opponent (MO). Matched Paired T-test was used to analyse each action between winners and losers. Result: The result revealed that there was no significant different in activity profiles between winners and losers except evade/dodge (p = 0.30) but there were significant different in action outcomes in HT (p = 0.000) and MO (p = 0.025). This study shows that 51% of the actions were kick, punch and sweep during match time. The result also showed that female exponents frequently used lower limbs to attack the opponents. Conclusion: The author concluded that the losers performed less hit target actions and higher miss opponent actions compared to the winners. The winners performed more successful actions than the losers during silat matches.

Keywords: Performance Analysis; Martial Arts; Hit Target; Hit Elsewhere; Missing Opponent; Combat Sports
THE EFFECTS OF A 6-WEEK PLYOMETRIC TRAINING ON MUSCULAR STRENGTH PERFORMANCE IN SILAT EXPONENTS.

Short Abstract

The effectiveness of plyometric training towards achieving certain goals in sport achievements is the reason why it was applied in the exercise training program in all sports. The effectiveness of plyometric training to improve muscular strength have to be prove as a demand exercise training in combat sports, instead of normal conventional combat sports training alone. The objective of this study was to investigate the effect the 6-week of plyometric training on muscular strength in Silat. Protocol: Thirty-four (n=34) male Silat exponents who have less than 2-years’ experience (mean age 14 ± 3.22), mean weights (42 ± 10.89 kg), mean heights (148 ± 8.792 cm) were randomly assigned into two group after underwent a pre-intervention test. Seventeen exponents (n=17) in the experimental group were participated in the conventional Silat workout routine and the plyometric training. The conventional Silat workout routine for the experimental group were set up for 3 times a week for 1-hour session and the plyometric training were set up for 2 times a week for 1-hour session. The control group (n=17) was only performed the conventional Silat workout routine for 3 sessions per week, for 1 to 2-hours session. The muscular strength was measured by the one repetition maximum test (1RM). The 1RM squat test was the instrument to measure the maximum strength performance. The squat test was accomplished by the Smith machine type device. A pre-warm-up was administered on every piece of equipment, included of 2 sequences of 12 to 15 repetitions at 50% of the value credited by the participants as 1RM rate. The total of exponents 1 RM final weights lifted were recorded. The subjects were required to attend the pre-test on a week before the intervention for pre-test session, mid-test on the third week of the intervention training, and post-test session on the end of intervention week. Results: The repeated measure mixed between-within ANOVA was utilized to analyze the results. End of the 6-week intervention, the results revealed that muscular strength performance were statistically changed across the observation (p<0.05) in the experimental group. The mean score was reported at 77.06 (SD = 24.94) on the pre-test, 84.12 (SD = 25.99) on the mid-test and at
100.0 (SD = 25.49) on the post-test. The improvement on the total of weight lifted was reported at 9.16% between PRE-MID session, 18.81% between MID-POST and 29.7 % between PRE-POST. Based on the results of the present study, plyometric training program was determined very effective to enhance the muscular strength performance in Silat. This positive finding prove the efficacy of plyometric training on the muscular strength on the Silat exponents.

**Keywords:** Combat Sports; Martial Arts, Sports Training, Gayung, Fighting, Malay
The gist and significance of wrist work in the old Polish fencing sabre based on selected techniques of cuts and thrusts.

Short Abstract

When discussing historical fencing techniques many elements like footwork, hands positions, distance, tactics are being well described and substantiated by hard evidence from various fencing treaties, memoirs, battle orders, pictures etc. Wrist joint, the most flexible and complex element in the equation, is but enumerated as another gear transmitting the movement to the weapon. The article presents development in reconstruction of an old Polish martial art, fencing with hussar sabre. Fencing with a curved weapon with special hilt construction, namely a thumb ring, added many solutions whilst responding after a parry, basically unobtainable to a straight bladed one. Wrist work, described by its practitioners in scarce sources only is deemed essential in execution of a number of historical techniques, subsequently described in the article: „paragraph 11”, „referendary cut” and a group of thrusts with application of an unexpected wrist work. It allows to gain control over the opponent’s blade and prevail in the clash. In comparison with techniques performed mainly with the elbow or arm movement it allows to launch a response from an unexpected direction and at a greater velocity. The text depicts technical aspects making hussar sabre fencing distinguishable amongst the other ones. It stresses scarcity of source materials on the subject alongside with the necessity of further research.

Keywords: wrist movements; carpal bones; old Polish fencing; hussar sabre; short stick fighting.
Motivation and MA&CS participation: Study protocol

Short Abstract

Martial arts and combat sports (MA&CS) popularity has been growing, and the associated benefits are widely known. Several studies report psychological benefits related to the MA&CS practicing (Chyu, 2010; Jansen P. & Dahmen-Zimmer, 2012; Chyu et. al, 2013; Lip et al, 2015). Albeit there is a broad body of research (following the tenets of SDT) on motivation for sport and exercise, research in MA&CS motivation is scarce or very specific in relation to a single discipline. The objective of this study is to understand the motivational mechanisms for adherence and retention on MA&C, to identify differences between MA&CS on participants Basic Psychological Needs and the quality of their motivational regulation. Mediation analysis (Hayes, 2013) will be conducted to explore the mechanisms of motivation on MA&CS participation.

Keywords: Martial arts and combat sports; self-determination theory; motivation; Physical activity adherence and retention; Mediation analysis.
Psychological characteristics of developing excellence in mixed martial arts athletes

Short Abstract

The aim of this study was to describe the perception of sports talent and excellence development in a sample of MMA fighters, and compare the obtained results with those of previous studies. A total of 42 adult (male and female) MMA athletes of several levels (amateur, semi-professional and professional) participated in the study. A socio-demographic questionnaire and the Psychological Characteristics of Developing Excellence Questionnaire – PCDEQ were used for collecting data. Statistical analyses included descriptive statistics and student’s t-test for means comparison. In general, MMA athletes obtained higher scores than those reported by samples of other sports in previous studies, and more specifically in factors I - Support for long-term success, II - Imagery use during practice and competition, and IV - Ability to organise and engage in quality practice. This can be explained due to the higher average age of our sample and the professional or semiprofessional level already achieved by many of the MMA fighters. The study also revealed that MMA fighters may need specific psychological training related to factor III - Coping with performance and developmental pressures.

Keywords: Martial arts; combat sports; mixed martial arts; MMA; talent identification; talent development; sports excellence.
Empathy in children practising judo compared to their non-practising peers

Short Abstract

Many authors dealing with martial arts and combat sports indicate that this form of activity contributes to limiting aggressive behavior towards other people. Contemporary psychological and pedagogical knowledge explains that empathy is one of the factors that determines a friendly and aggression-free attitude of people towards others. Basing on that theory, this article attempts to present differences in the level of empathy among children practising judo for a minimum of two years, and their peers who do not practise any martial arts. It was also important to describe these elements of the methodology of working with young judo adepts which, in the opinion of trainers, may contribute to a more effective internalisation of the value of empathy among children. Obtained research results indicate that differences in the level of empathy between judo practitioners aged 8-12, who practise judo for a minimum of two years, and children who do not engage in any martial arts, are statistically significant. What differentiates the studied groups is the affective factor of empathy, which turned out to be higher in the case of a group of young judo adepts. These results are also reflected in the statements of judo trainers, who, when mentioning the elements of educational work that in their opinion can form empathy among children, pointed mainly to the ones that are responsible for its affective aspect (emotional self-regulation and emotional self-awareness).

Keywords: empathy; judo as an educational system; upbringing to values; sport pedagogy.
Old polish warrior's path - psychophysical and martial preparation of a young nobleman in modern Poland

Short Abstract

The article attempts to outline the path a young nobleman underwent in the 16-17th century Poland in order to achieve prowess in battle martial arts. It presents patterns and ways of training the nobleman was subjected to from an early age, the process of a future warrior's mental and physical preparation. Furthermore, it describes various types of body exercises and trainings with many weapon types. A fundamental novelty is presentation of the training methodology. Its over four centuries of age notwithstanding it has basically been valid until nowadays and encompasses such features as diet or exercise intensity. Eventually this article presents the individual stages of said training, closely related to warrior's age and psychophysical development. Material for the study was obtained thanks to the textual analysis, both from the era (16 to 17th century sources) and from the limited literature on the topics (monographs, magazine articles, periodicals, the Internet) addressing the subject. The result depicts arduous, however consistent and sensible old Polish training system. After many years of wisely carried out exercises an effective, skilled warrior was produced, furnished with high fighting skills and morale, ready to fight his country enemies. At the same time whilst getting old such a warrior could train the next generations of Homeland’s knights-defenders. The objective of the article is to draw attention to the subject of Polish warriors, their training and martial arts, hitherto unmentioned in English literature and to encourage further research in this field.

Keywords: Polish sabre fencing; palcaty; training methodology; Polish martial arts; short stick fighting.
Thomas A. GREEN¹

¹Texas A&M University (USA)

“Deep Cover”: Identities and Ethics in Martial Arts Fieldwork

Short Abstract

Qualitative research in the social sciences typically requires a personal engagement with resource persons. The widely used participant-observation method requires that the researcher assume as far as possible the role of community member. Even when participant observation is not the chosen method, group members assign identities to investigators. Role assignment in martial contexts may range from the “intruder” who disrupts ongoing events (e.g., outsiders may not see “secret techniques”) to one who is allowed insider access, usually after having gone through some test or rite of passage. Data collected in “natural context” is ideal. The primary problem here is that act of observation inevitably changes phenomena under examination. The most effective means of gathering information in a natural context is by engaging in what is known in the Intelligence community as “deep cover” actually joining a community for the purpose of secretly gathering information. This, of course, brings with it serious ethical dilemmas. While it is clear that we must all address the issue of transparency vs. efficiency, most decisions actually are made on a case by case basis. I suggest that it may be time to develop a general set of guidelines to help us keep faith with informants and accomplish our academic goals of accurately depicting the martial cultures with which we engage.

Keywords: Qualitative research; fieldwork; ethics; identity; participant-observation
Sociological analysis of three dual combat practices in Portugal: the case study of aikido, judo and wrestling

Short Abstract

The aim of the present paper it’s to show the results of a sociological study on three sports of combat (aikido, judo and wrestling) in Portugal. There is no comparative study on these sports practices. In our initial question, we wonder if the sociocultural characteristics of individuals determine the affinities that are generated in the practice of dual combat sports ofprehension, in particular of aikido, judo and wrestling. Based on the problematization, we assume that the sociocultural characteristics of the practitioners of three dual combat sports determine the relations and affinities in the practice of the modalities in appreciation, although family tradition, career opportunities, visibility and social recognition demarcate the choice between them and the type of involvement in sports practice. We have delimited the empirical object to the coaches of aikido, judo and amateur fights in Portugal and Autonomous Regions (Madeira and Azores), in the sport season 2018/2019. Three theoretical hypotheses were defined to be analysed and discussed in order to verify their truthfulness. The questionnaire and the interviews are ongoing and we have currently 38 questionnaires and 5 interviews validated. The data is being processed in SPSS Statistic. The provisional results show that sociocultural characteristics of the practitioners determine the relations and affinities in the practice.

Keywords: Sociology of sport; Martial arts; Sport of combat
WOMEN’S JUDO IN SPAIN. PAST AND PRESENT

Short Abstract

Women interested in sports have faced up some barriers and prohibitions, in order to participate and become competitors, especially in martial arts and combat sports.

Despite this, Spanish female Judo has achieved great international success and the female participation is high at all levels. However, their presence in sports media is not equal, regarding on the main results and medals obtained. This study aims to show the history of women in Judo, particularly in Spain, as well as to highlight their outcomes. In addition to offering a description of the female Judo coverage in the media and analyzing if there is an unequal treatment depending on the gender in Judo. We started with a deep review of the literature about history of female Judo, the incursion and evolution of female judokas were examined and the main results of Spanish judokas since the beginning of women competitions were highlighted. Also, we performed a descriptive and an exploratory study was developed to analyze the online press related to sport in Spain.

Keywords: Judo; women; sports history; female Judo coverage; sports online press
The sportivization process of a martial art: the karate

Short Abstract

This study addresses the historical trajectory of Karate, particularly in relation to the processes that favored its inclusion as one of the five modalities that will be present at the 2020 Olympic Games in Tokyo, Japan (Rock Climbing, Surfing, Skate, Karate and Baseball/Softball). There were several structural modifications during the historical process of Karate (terminological, physical and theoretical) that were fundamental for this modality to be projected on various fields of world society (Frosi & Mazo, 2011; Guttmann & Thompson, 2001; Pucineli, 2017). The literature review was the methodology used in this research. Several attempts and efforts were identified to enable Karate to join as a sport in the Olympic Games. It was concluded that the agents (federation leaders, presidents, coaches and athletes), along with institutions (clubs, companies, government, among others) were involved in a process that aimed to meet the requirements of the International Olympic Committee (Barreira, 2013; Oliveira, Telles, & Barreira, 2019). In this context, a constant movement of changes was verified as a result, towards the accomplishment of a sportivization process that includes changes of rules and norms (JKA, 2018), as on equipment and inclusion of safety accessories for athletes (implementation of gloves, tatami, among others); adhesion of technological tools (electronic scoreboards, video review). Thus, it is possible to observe various transformations in the development of this modality that gave shape to what Karate is today, which has made it a rookie modality being conditioned by market interests.

Keywords: Karate; Olympic Games; Olympic Movement; Trajectory; Sportivization Process.
The role of pre-reflexive processes in learning how to fight: contributions from phenomenology

Short Abstract

This study consists of a description on pre-reflexive processes in learning how to fight. The objective of this investigation is to present and discuss them through phenomenology as a philosophical and methodological point of view. It is a way to comprehend each phenomenon from its own structure, not apart from the reality of those who live it. In embodied corporal practices, the body constantly moves and there is not much time for the practitioner to reflect before choosing and doing each technique. We briefly present the main concepts to promote an understanding on pre-reflexive acts through phenomenology: body, awareness/consciousness, perception, body schema, habit. This can broaden the way we usually see the learning processes, which cannot count only on explanation of techniques. A practice to be embodied must be lived by the body. We must enable the bodies to be challenged not only to learn or master a technique but also to generate new perceptions and movements in the situations we are in. One can only learn how to fight when fighting.

Keywords: phenomenology; martial arts; combat sports; sports psychology; embodiment
From phenomenology for a theory of Corporal Combat and Martial Arts

Short Abstract

This work aims to propose, based on previous phenomenological outcomes, a Theory of Corporal Combat Phenomenon (TCCP) and to anticipate directions for the propositions of a Theory of Martial Arts Phenomenon. Although theories concerning Martial Arts (MA) aren't uncommon, there is no one based on phenomenological analysis. Previous theories concern natural assumptions about values and conceptions of what MA is, or even deconstruct the phenomena. Guided by Edmund Husserl philosophy, outcomes about combat experiences analyzed by bracketing natural knowledges allows to grasp the inner structural intentionality that, in all varieties of manifestations, gives impulse for MA happen. A first essential intuition approaching what corporal combat is, have been made by Figueiredo (2009) who conceptualize Combat Sport (CS) as defined by having the body as target and means of the actions. But not all Corporal Combat manifestations analyzed in order to “to back to the things themselves” - Physical Brawl, Fighting, Playing of fighting, Duel, Self-defense and Instrumental Offensive Combat - are MA&CS (Barreira, 2017). Those results are now simplified and presented as a theory fostering not only an easier apprehension, but the visualization of new investigative problems focused on practitioners’ experiences in different contexts. The TCCP leads to the conclusion that corporal fighting experience is central to MA manifestations as Arts complex phenomena given as teaching, learning, training and fighting practices in community contexts. Future descriptions on how occurs martial arts practitioners’ development when experiencing different Corporal Combat can lead to a Theory of MA Phenomenon.

Keywords: phenomenology; martial arts; combat sports
Karate's ambiguity: traditional martial art or modern combat sport

Short Abstract

After a radical conversion of the old Okinawan (anti-samurai!) martial art toti in 1920s, a new, in effect Japanese modern combat sport, karate, came into being. The very first karate sports contest took place already in 1930. But, at the end of 1950s, karate started to be exported to the Western world as a traditional martial art of Japanese samurai, even if the samurai hadn't known karate. That then already omnipresent doctrine has allowed no other perception despite the fact that, globally, the prevalent phenomenon in the field has been karate sports contests in bouts and katas. Exposing the concept of karate as a traditional martial art to be an unhistorical, artificial ideological superstructure, this study is based on more than 50 years of accumulated skepticism of the author that has been confirmed through communication with students of various karate styles and evaluation of several publications and studies. It is hoped that the findings of this basic study will encourage the sports scientific community to favor further research directed to indisputable and unambiguous explanation of karate.

Keywords: traditional karate; toti; gendai budo; bouts contests; kata contests.
Remarks on philosophy of the *Idokan karate*

**Short Abstract**

Every school of *karatedo* presents some special values and norms. May be, that philosophy of *Idokan karate* is partially similar to other schools and especially represents the *Ido* philosophy (that is not worldwide known). It is a real, practical philosophy, internalised and used by groups of *karateka*, as a form of today's warrior pathway. The author tries to answer the following questions: What ethics, values and rules are prominent in the *Idokan karate*? What is the specific, symbolic content of this style and school? This is a single case study, involving a content analysis of literature and the wider discourse, and the hermeneutic phenomenology. The study uses the analysis of broad discourse, which concerns both scientific studies and popularizing publications. Not without significance is the fact that the author has actively practiced Asian martial arts for over 40 years. The specific, symbolic content of the *Idokan karate* is taken from philosophic Taoism, Chinese and Japanese tradition of martial arts, and from Christianity. Its interpretation shows that *karate* athlete has to go the moral way. It is the pathway toward being a better human. Such teleology comes from special values and rules, and aims. In the normative ethics, the Decalogue and the idea of nobility (the *Homo creator nobilis*) are most important. *Tao* in *karate Idokan* is understood as God's Word, the principle of love and the way of the Heavens.

**Keywords:** martial arts; values; aims; karate; Idokan.