

## INTERVIEW in "TAEKWONDO-ACTUELL" (English)

**1) Dr. Beis, you are a professor at the Aristotle University in Thessaloniki - the largest university in Greece and one of the largest in Europe. You have been teaching Taekwondo there since 1991 - a major exception at European universities. How are your experiences with Taekwondo at the university, how is the sport received and what role does it play for the students?**

1. In 1991, the Faculty of Physical Education and Sport Sciences professors appreciated the success of the then Hellenic National Teams and were convinced this was a new Olympic Sport that would bring many international distinctions to Greece. They therefore decided to integrate Taekwondo in the curriculum as an elective course: I was assigned to teach the courses from the very beginning. Following the great success of Greece in winning the bronze metal in the Barcelona 1992 Olympics, as well as the 1994 IOC decision in Paris to designate Taekwondo as an official Olympic sport, the Faculty of Physical Education and Sport Sciences professors decided to introduce Taekwondo as a specialty field course as well. Ever since, more than 2500 Physical Education graduates have taken the elective Taekwondo course, something that constituted "live" advertising and promotion of Taekwondo into the Greek athletic community.

At the same time, more than 300 Physical Education graduate students received their degree from the specialty field. Most of them were Taekwondo champions with international distinctions (Olympic, World, European and Greek champions). The Faculty of Physical Education and Sport Sciences has actively supported Taekwondo in the long run, outside the university as well. Many professors have been teaching at the General Secretariat of Sports and the Hellenic Taekwondo Federation Coaching schools since 1991 and they still do today, educating uncertified coaches and upgrading their level of knowledge. Through their work, they have contributed to the high development of Taekwondo in Greece (more than 400 schools) and the many national distinctions, even in the Olympic Games.

**2) What are your main research areas?**

2. When I was a champion back in the 1980s, I suffered injuries multiple times. Up until 1983, competitors used to wear only a chest protector of poor quality which did not protect against kicks. There were no leg, arms or head protectors. The ones introduced in 1984, were also of poor quality – essentially, they did not protect the athletes at all. In fact, we used to fight on the hard field ground and falls would cause serious injuries. Soft mattresses were not introduced until just before 2000. In 1990s, when I was a federal coach, I noticed that Taekwondo injuries continued to be serious and high in number, especially the ones to the lower extremities, as well as to the head. We had many knock outs from kicks to the head which were very serious and involved loss of consciousness, serious craniocerebral injuries, fractures, amnesia, concussions, etc., for many years. Man's health is the most important thing in life. Sports should promote health, not harm it. This is why I decided to study injuries. My thesis on my Master of Science in Coaching, which I completed in 1996, was titled "*Injuries in Taekwondo National Championships*". In 2001, I completed my

PhD thesis titled "*Craniocerebral, Cervical and Spine Injuries in Taekwondo and Boxing*", in which I examined the serious health issues caused by knock outs on athletes' heads. I subsequently made many presentations on injuries in Taekwondo in International Conferences and published in journals.

**3) Your new book is called: "TAEKWONDO - THE WAY TO WIN. The Science of the Fight ". How can sports science help coaches and athletes to be successful?**

**3.** The aim of the book "*THE WAY TO WIN. The Science of the Fight*" is to become an essential tool for athletes who train daily in Taekwondo. The book delves into the development of Taekwondo as an Olympic sport; it reveals the hidden sides of sparring, supports daily training, and describes in detail every technique (kinesiology, kicks, punches) and combinations (in total 477). Maybe it is the first book to internationally document a classification of every kick and its kinesiology and every technique and its variation in categories (i.e. attack or counter-attacking one step, in two steps, etc.) to facilitate accurate and fast learning. The techniques and tactics used in sparring are described in detail for every move, in conjunction with parameters such as flexibility, injuries, and biomechanics. An analysis of the advantages and disadvantages of each move and frequent mistakes made by athletes, and negative effects, follows.

At the same time, it is an **INTERACTIVE BOOK on modern Taekwondo competition**. The book is also ready in electronic form (e-book) as an independent e-book, or together with the book. All the techniques are presented in a realistic manner on VIDEO (not DVD due to limited capacity, but online) with the same Chapters, order and numbering as described in the book. The total number of videos is 632! The videos were taken and processed by specialized professionals in HD (high definition). The recording was done with three cameras at the same time, from two angles (frontal-front and diagonally-sideways). The techniques were filmed in slow motion from both recording angles. Access to the videos of the book is easily achieved through PC, Laptop, Tablet or Mobile Telephone in internet connection at: [www.kostasbeis-tkd.gr](http://www.kostasbeis-tkd.gr).

All sparring techniques are displayed in short in separate tables so that they can be taught by the instructor in a way that is pedagogically correct. The division of the techniques considered primarily -and most importantly- the degree of difficulty in relation to a child's age (maturity and potential) and secondly, their level of capacity based on rank (color or black belt). The specific objectives of the proposed teaching techniques are: safety in execution by children athletes, progressive-gradual increase in difficulty, and smooth continuous improvement. At the same time, the theory part and the theoretical support in each technique complete the knowledge the athlete and the coach must possess. **This book is essential, both to coaches and athletes.** Those athletes, who will study the book and absorb the information details of technique and tactics, will discover a difference in the quality of daily training, which will yield a more rapid improvement in performance. **The viewing of the videos** of every technique in the book will ensure proper learning of the techniques and being permanently stored, in detail, **in the long-term memory part of the brain.**

**4) In your book you write: "We fight with our brain, not with legs or arms." What would you say - what percentage of success is determined by mental aspects?**

4. Every organ in our body obeys commands received from the brain. The brain receives environmental stimuli through our senses which it then analyzes, sending commands for motion, reaction, etc, via the Central Nervous System. No body part can act without receiving an order from the brain. The organs in our body are just the "servants" that just obey the commands they receive from the "emperor", which is the brain. We do not only train our hands and legs in techniques, or our cardiovascular and pulmonary system to have stamina, etc.: through every movement, technique or reaction, we train our brain as well. Our brain learns the technique and organizes every detail involved in a kick, into a small program: speed, strength, distance, balance, the muscle groups that will work together and their sequence, the position of hands, torso, center of gravity, etc. All this information is stored in the macromemory of the brain; it is then retrieved right at the moment of executing a technique, within milliseconds, resulting in the technique being executed perfectly and without thinking.

It is therefore very important that the athlete's mind be absolutely focused on every technique and tactic detail during training, in order that the brain receive the right kind of information. If training takes place absentmindedly, it becomes mere physical exhaustion that improves physical condition; the brain is non-participant nonetheless and does not absorb the technique and tactic details. This is why we see athletes who are capable in training but do not know what to do during a match or make inexcusable mistakes – that happens because their brain has not stored the right kind of information and cannot give proper commands. Therefore, for an athlete to maximize performance, mental state and good psychical and emotional condition are more important than physical abilities – which are trained and improved through daily practice alike.

**5) To what extent are these mental aspects part of the innate personality - how far can they be trained?**

5. Mental and emotional skills are an essential part of every individual's personality and differ significantly from person to person. The more charismatic a person is by nature, the more advanced he/she will be in a championship with respect to others. This is the reason why we see athletes with less years of training or with less hard and strenuous training reaching higher distinctions, as opposed to other opponents who, even though they train harder and longer, they cannot reach the same level of performance or distinctions. However, through daily Taekwondo practice, many wonderful skills are developed together with physical exercise, very effectively for every athlete, without exceptions. Taekwondo has a positive effect on a child's intelligence. Through training and sparring the child develops the ability to: think, focus, keep focused in training, and sparring, memorize of techniques, analyze complex situations in sparring, control unforeseen developments in sparring, think fast, make the right decisions. Finally, daily training in Taekwondo materially contributes to the child's character development and forming of personality, as it teaches him/her: respect, kindness, discipline leading to self-discipline, obeying

teachers and parents, cooperation, solidarity, help and contribution, positively developing an identity as an athlete during the sensitive period of adolescence, choosing positive role models in life, friendship and socialization. These changes take place slowly but steadily, without the athlete realizing at first.

However, when the child grows up, he/she will comprehend that he/she has obtained qualities through Taekwondo which are more important than physical abilities. The child may stop training and forget the techniques, but these qualities will stay with him/her in the form of personality traits and will help him/her through every step in his/her life. Taekwondo is a wonderful Olympic sport, a full physical workout, a very effective martial art, but at the same time, it is also a wonderful method to properly educate our children and millions of children in this world who practice Taekwondo, so that we can offer healthy people in our society through it – healthy not only in body, but also in mind and behaviour: people with more mental health and emotional balance so that every Taekwondo student can have better quality of life and become a useful person who will benefit the society he/she lives in.

**6) You write, "Sports Psychology has developed clinical methods that can help athletes practice and improve their perceptual ability and reach higher levels much faster" - could you give us an example of which methods these are?**

6. Many methods that support and improve an athlete's state of mind have been developed in organized scientific sports psychology laboratories. These contemporary scientific methods are spectacularly reinforced through technology. For instance, an athlete may practice and improve important skills that play a significant role in a match, like improving his/her mental stamina, peace of mind, quick thinking and making the right decision under conditions of extreme mental pressure and stress (as is the case in critical matches where medals are involved, or when the athlete has to compete while affected by an injury, etc.). There are also methods to improve cognitive skills and perceptual abilities – meaning that our athlete knows what the opponent will do next and when, before he/she even moves! Support is also available to athletes with special problems, i.e., quickly overcoming emotional injuries caused by an extremely negative experience such as a knock out with an injury to the head, and without leaving a residue. There are athletes who suffer from insomnia and/or pre-competition stress to the point where they vomit just before the match and whose performance significantly drops, even though they are physically ready! Besides from the basic mental preparation, any individual mental or emotional issue can be resolved, but that requires working with a Sports Psychology specialist.