How can the quality of patterns competition be improved?

By

Mr. Nicholas Symonds, 6th Degree

Thesis prepared for 7th Degree grading

International Instructors Course 113

Quebec, Canada

 23^{rd} – 25^{th} September, 2016

Introduction

In this thesis I will investigate the current patterns competition system and propose alternative options which could lead to a more consistent and higher quality result, as well as taking into account what a pattern should be in Taekwon-Do as a martial art versus a sport.

My Experiences As A Patterns Competitor

I took part in my first competition as a yellow belt in 1990 and at this time the rules stated that each patterns competitor would do their pattern one at a time. Of the five umpire scores, the middle three would be taken and a league would be formed to rank the competitors from 1 to N. The competition rules were largely based on technical content, accuracy of the techniques, sinewave and power. I competed in this way all the way up to 1st degree in 1993.

Although this system may seem quite raw, I feel like it had a closer relationship to Taekwon-Do as a martial art as opposed to Taekwon-Do as a sport.

I also started competing internationally in 1993 and I became aware of a change to the competition rules that I had experienced to date. These rules were based on two competitors performing patterns next to each other. I was curious as to why the two judging systems were so different. I understand from speaking to Grand Master Marano that the Generals' reasons for introducing this system was because the standard of competitors was very low and therefore it was easy to see the winner.

Given the closeness of ability in competitors who compete today, I question if the current patterns competition rules will find the best practitioner and not just the best sportsperson.

My experience has sparked an interest in understanding, what is the best system for judging patterns in a competition. In addition, I want to explore taking the patterns competition system back to its origins by proposing a system based on the encyclopaedia. I believe that this will help find the best practitioner and not just the best sportsperson.

Patterns Competition As A Competitor

A pattern is a set of fundamental movements both offensive and defensive against an imaginary opponent. Each movement has an application, and each type of movement has a different purpose. Below is what I understand to be the purpose of each type of movement:

- > Strike a technique that arrives in an arc to designed to break bone.
- > Thrust a piecing technique designed to pierce skin.
- ➤ Block designed to parry or break bone.
- Punch designed to cause an internal damage.

A competitor should be able to execute each movement by correctly demonstrating the different techniques listed above. In other words, when the pattern movement is applied in a real situation it should be effective. I do not believe that the current rules encourage competitors to do this. For example, competitors will often prefer to maintain balance and compromise the power of the technique, or not perform a jumping kick properly through fear of wobbling.

Competitors train exceptionally hard to prepare for major competitions and in my opinion, competitors on the international circuit are the most prominent members of their country. For this reason I believe that it is important for them to perform each technique correctly, effectively and how it is defined in the encyclopaedia. This way, they are not just showcasing a sport, but a martial art with real power and application.

I do not believe that having two competitors performing a pattern at the same time benefits the competitors or the competition. The likelihood of a clash or the competitor going out of the ring increases which only leads to point deductions. This does not reflect how good a person is at performing a pattern. In addition, I believe that each competitor deserves the full attention of the five umpires during their performance to ensure that each competitor is judged evenly and is not distracted by the other competitor. For example, if there are six mistakes in each movement, how can each umpire see all of those in both competitors at the same time?

Patterns vs. Other Events

I have also studied the scoring systems for other competition events, such as power, special technique and sparring. I believe that these events have a much clearer way of deciphering the winner. In power, it is easy to see if the board has broken, in special technique it is easy to see if the competitor's foot made contact with the board and in sparring it is easy to see if the technique made contact with the target area. I believe that to create a patterns scoring system that is this clear cut, each competitor requires the full attention of each umpire to ensure that no mistakes are missed. For this reason, I believe that competitors should perform their pattern one at a time. In addition, I believe that patterns umpires require specialised knowledge to be able to determine who the best practitioner is. I will discuss this in more detail in the next section.

Umpires

Who should the umpires be?

Judging patterns in a competition involves many variables, for example, correct start and end position of a technique, correct rhythm and correct stance. This is a lot of things for each umpire to see, and double the effort to see this for two competitors at the same time. In addition, to judge patterns a vast amount of knowledge is required for each pattern. For this reason I believe that the patterns umpires used at international tournaments should be selected by the ITF Technical Committee. This would ensure that each practitioner would be marked against the same standards and would give competitors and coaches total confidence that when their countrymen are competing they are being judged by the best technicians in the world.

Where should the umpires sit?

Patterns competition has five umpires at the front of the mat, all looking largely in the same direction. With the exception of Po-Eun, competitors will always turn their back to the umpires for a minimum of one movement, making it impossible for the umpire to be certain that the technique was performed correctly. In my experience, I have seen competitors not perform the flying side kick in Ge-Baek fully as they know that they cannot be seen by the umpires. To

combat this, I propose that the umpires sit in each corner of the ring. This way, every movement can be seen by at least two umpires as the competitors face each direction to perform the pattern.

How does the human brain function when judging two people in this way?

When judging two people at once I think it is essential to take a brief look at how the brain work in these situations and ask a couple of questions. I requested the input of one of my students, for a neuroscientist's perspective:

The key challenge for the brain in attempting to simultaneously judge two competitors concerns attentional capacity. The question of whether or not a person can attend to two things at once is an important one that has led to extensive study. A commonly accepted result of these investigations is called the "biased competition theory", which summarises how the brain processes visual information to direct attention. When looking around, everything you can see competes for your attention on some level. The biased competition theory describes how the brain's selection of one particular object can be influenced by complex mental processes; in the case of this thesis, the umpire's intent to scrutinise every detail of a competitor's pattern brings these aspects of their performance into focus. It is this focus, this direction of attention, that allows the umpire to fulfil their duty in recognising the quality (or lack thereof) in a pattern. However, execution of this attentional process dictates that, while attention is directed at one object in the visual field, processing of other objects is compromised. This is why we have competition bias in the first place; we do not have the visual processing capacity to assimilate as much detail about two objects as we do one. Various experiments have demonstrated that multiple stimuli in the visual field suppress each other when presented together, but not when presented alone.

Having established that an umpire's mental processing of an event influences what they pay attention to has various further interesting implications for their ability to judge two patterns simultaneously. For example, an umpire might suspect that a competitor's improper L-stance may not be a one-off, and may devote their attention primarily to that competitor's footing for a time. The second competitor might subsequently make the same mistake during this period, but it would go unnoticed. Such issues are not resolved by the presence of multiple umpires viewing the pattern from the same side, presented with the same visual cues, as they may adjust their attention or respond identically. A case can therefore be made for the value of positioning umpires at as great a variety of angles possible. While discussing every result of its impact is beyond the scope of this thesis, the implication of attentional bias for simultaneously judging two patterns is clear: Umpires would perform far more accurately and fairly if attending to one competitor at a time.

- Dominic Friston, 1st Degree Black belt, MSci Neuroscience (Hons)

Taekwon-Do as a Spectator Sport

Why do we want to improve the quality of patterns competition? I often imagine patterns as a television sport alongside other events and disciplines such as boxing, gymnastics and figure skating, but I believe that the current patterns judging system that we have is far too complex for those outside of the martial art to understand. Patterns are a single competitor discipline and I believe that from a television or spectator point of view it would be far more dramatic and captivating for the audience if they were to see one person at a time. This appears to be the standard format for all individual competitor sports and I believe we should be no different if we are to progress our art in to the modern world of sports and entertainment. If after each pattern, the judges displayed their scores, it would be clear to the audience who ranked where in the category.

From a spectators point of view, I also believe a simplified scoring system should be adopted to allow them to clearly understand how points are deducted from each competitor.

The Scoring System

The encyclopaedia offers some strong guidelines for rules on judging patterns, for example, observing the Theory of Power and Training Secrets of Taekwon-Do.

The Theory of Power (pages 48-63, condensed encyclopaedia)

An important aspect of Taekwon-Do is power. The encyclopaedia states that "obtaining a high level of reaction force, concentration, equilibrium, breath control and speed…will result in a high degree of physical power". Below I will go through each of these elements and explain how I think they could be used to mark patterns in competition.

Reaction Force

This element is based around Newton's Law which states that every force has an equal and opposite reaction. In patterns movements this is very important as it ensures that the correct final position and posture is maintained. Every hand technique in Taekwon-Do has a reaction arm. Therefore I think that the patterns competitors should be marked if they are using their reaction arm correctly.

Concentration

This element is based around impacting the force onto the smallest target area to increase the effect of the technique. It is split into two parts, the first is the ability to concentrate the bigger muscles around the hip and abdomen towards the appropriate tool at the right time. The second is to concentrate the attacking tool onto the opponent's vital spot. In patterns movements both of these elements can be marked, does the competitor use their hips and abdomen to generate power at the correct time, and do they focus the correct attacking or blocking tool in the correct position?

Equilibrium

This element focuses on keeping the body well balanced to ensure both offensive and defensive movements are as effective as they can be. In patterns competition this can be assessed in a competitor's stance, for example, is the centre of gravity in the correct place, or when kicking, does the competitor maintain their balance?

Breath Control

This element relates to the exhaling of a sharp breath at the critical moment to ensure the technique is focused and uses the most power it can. In patterns competition, the umpires can assess if the competitor's breath control is representative of the technique.

Mass

This element is based on the energy generated by the body and how the practitioner can use their body movement to generate more power. More specifically, how the practitioner can rotate their hips in the same direction as the technique to generate power as well as using knee spring at the beginning of the movement and dropping their body weight at the point of impact. In patterns competition, the competitor can be marked on the use of correct sinewave and timing to generate the maximum power.

Speed

The encyclopaedia states that speed is the most essential factor of power. This along with the other elements in the Theory of Power, flexibility and rhythm come together to allow a practitioner to produce the maximum power in Taekwon-Do. In patterns competition, the competitor can be marked on showing the correct speed, relaxation and acceleration in the pattern.

Speed and Reflex

The encyclopaedia states that it is important for students to understand the relation of speed and the execution time of techniques in order to apply them effectively. In patterns competition, the competitor can achieve high marks by performing realistic techniques with correct timing.

The Training Secrets of Taekwon-Do (page 42, condensed encyclopaedia)

The Training Secrets of Taekwon-Do provide principles of how techniques should be performed in Taekwon-Do. The theory being, that students who follow these guidelines under proper guidance of an instructor will learn the true techniques of Taekwon-Do. For this reason, I believe that these secrets should be incorporated into patterns competition rules. Below I have summarised how each secret could be categorised in patterns competition.

- 1. To study the theory of power
 - a. Patterns competition category: Power
- 2. To understand the purpose and method of each movement clearly
 - a. Patterns competition category: Technical Content
- 3. To bring the movement of eyes, hands, feet and breath into a single coordinated action
 - a. Patterns competition category: Timing
- 4. To choose the appropriate attacking tool for each vital spot
 - a. Patterns competition category: Focus
- 5. To become familiar with the correct angle and distance for attack and defence
 - a. Patterns competition category: Technical Content
- 6. Keep both the arms and legs bent slightly while the movement is in motion
 - a. Patterns competition category: Relaxation
- 7. All movements must begin with a backwards motion with very few exceptions. However, once the movement is in motion it should not be stopped before reaching the target

- a. Patterns competition category: Backwards motion
- 8. To create a sinewave during the movement by utilizing the knee spring properly
 - a. Patterns competition category: Sinewave
- 9. To exhale briefly at the moment of each blow except a connecting motion
 - a. Patterns competition category: Breath control

A Potential Patterns Scoring System

My proposal groups together various elements from the Theory of Power and the Training Secrets to form a system that simplifies what the umpires are looking at. Below is my proposal for a patterns marking system which I believe takes patterns back to the guidelines set out in the encyclopaedia.

Categories

Power - was there a consistent use of mass, speed, reaction force, and timing?

Breath control – did the competitor breathe correctly depending on the techniques?

Technical content – did the pattern start and finish on the same spot? Were the techniques prepared and performed to the correct height? With the correct tool?

Equilibrium – did the competitor maintain balance while executing the movement correctly?

Rhythm – were the correct rhythm and motions used within the pattern?

Sinewave – was sinewave used during the movements?

Marking system

Each of the categories above should be marked out of four points with an emphasis on the competitor to perform with consistency throughout the pattern.

1 point – has performed this element in 20% of the pattern

2 points – has performed this element in 50% of the pattern

3 points - has performed this element in 75% of the pattern

4 points – has performed this element in over 75% of the pattern

Overall the objective of the criteria above is to ensure that the competitor is performing an accurate pattern performed to an imaginary opponent with realism.

Observing the Theory of Power and Training Secrets of Taekwon-Do in patterns competition gives us a stronger link to the correct way of performing each technique and will give the competitors a framework to work within to ensure the correct execution of techniques.

The Competition

At the competition I propose that the competitors perform one at a time in a preliminary round of one designated grade pattern, which eliminates competitors, leaving only the top six competitors for the next round. Following this, the remaining competitors will perform a second designated grade pattern, where they will be ranked one to six with the top three receiving a medal. In addition, this proposed system could also allow competitors to receive feedback on their performance encouraging them to improve on their weakest areas.

Conclusion

In conclusion, I believe that a simplified marking system in patterns competition will aid the understanding of spectators, give the umpires a clearer framework to score the patterns and help the competitors perform the patterns with realism. In addition, having one competitor performing at a time allows umpires and spectators to focus on one competitor and gives the competitors confidence that they are being judged in the same way as each other.

The proposed marking system will help standardise Taekwon-Do patterns by allowing the sport, and the martial art to be based on the same principles i.e. the Theory of Power and Training Secrets of Taekwon-Do. To raise the standards of patterns competition I think that the Technical Committee should appoint the umpires, as this will give the competitors and coaches confidence that the best practitioner will win.

Overall I think that this will improve the standards within the ITF and allow for a fairer and more robust competition system.