

ADAPTING ITF TOURNAMENTS FOR ATHLETE DEVELOPMENT

ITF events, whether national or international in nature, typically have to manage the logistics of bringing together hundreds or even thousands of participants in order to satisfy the requirements of economic viability, fairness of competition and short time frames. These events, whilst often successful as economic ventures, do not always meet the needs of the participants as well as they might. This is especially true in the case of younger and developing athletes.

NEEDS OF YOUTH AND DEVELOPING ATHLETES

First and foremost, developing athletes need time on task in order to enhance and develop their skills. There is no more representative environment than real competition, and no better test of skill than a real opponent. The techniques and skills trained in the Dojang at best try to simulate the competitive environment in which they'll be truly tested, but until a real opponent applies resistance and attempts to bring their game plan to bear we can't definitively say whether or not the skill is 'ready'.

This is as true in pattern, special technique and power test as it is in sparring, though the obstacles to skilful performance to one's maximum potential are more internal and environmental in nature. Although your opponents have little bearing on the quality of your performances, it just doesn't feel the same practicing in the gym as it does when the time comes to perform under competitive stress.

The more time, attempts, practice and feedback we can afford a competitor in any given competition to test themselves, learn and iterate, the more rapidly they will develop in their art. Therefore we expose the issue with the format of the majority of competitions being run at the moment in all countries.

PROBLEMS WITH CURRENT FORMATS

Single elimination events have the inevitable issue that the time on task is inequitably divided, affording greater time to the more capable and skilful athletes while eliminating those most in need of development at the earliest stages. In any pyramid draw system, 50% of the competitors will exit the event after the first round which affords little time for learning 'on the job'. The short duration of ITF bouts also compounds the issue, resulting in a huge outlay of time, money and effort to gain a very limited experience. A colour belt competitor might (in the worst case) travel several hours and spend the whole day or even a weekend to compete in pattern and sparring yet only have the opportunity to complete one pattern and 2 minutes of sparring under the eyes of judges.

Each of the disciplines brings its own challenges, but the fundamental problems are the same. There is a very limited time in action for the majority of participants to test their skills, learn from mistakes, apply feedback and iterate towards a better performance. Let's consider an example.

Child A and Child B compete in green belt pattern. Child A is eliminated in the first round. Child B makes it through 3 rounds and loses in the semi final. (fourth round). Child A has one performance to review, receives one set of feedback and cannot apply it right away, losing the benefit of recency of feedback. Child B has 4 performances, 4 progressive sets of feedback and three opportunities to apply the feedback to improve their performance.

Child B has the same advantage we'd expect a student who can train three times weekly to have over a student who can attend once per week. It magnifies over time too. There is a higher likelihood that those that progress in

their first events will gain positive reinforcement on top of the exposure, practice and feedback and be more likely to make similar progress in future events.

A further difficulty with single elimination pyramids is that the matching of competitors is entirely random (in the absence of seeding) meaning that the quality of the learning experience is difficult to predict. We learn best when the degree of challenge is slightly outside our comfort zone, that is to say when the matches are close. We learn relatively little from one sided encounters. To combat this I will look at strategies to bring competitors of similar ability together in order to promote learning and the experience of competence.

In order to give more athletes time and space to develop at different rates I believe we need to consider alternative competitive strategies that prioritise quality and quantity of competitive experience over the expedience of quickly determining the winner. I will address each discipline in turn, but first a short overview of the unique challenges faced in each discipline.

PATTERN

Pattern offers the ability to make meaningful changes between rounds, especially at an early developmental stage where performances can be improved upon and errors minimised through feedback that can be implemented right away. Those progressing through the rounds gain more opportunities to practice, perform and review. 50% are typically eliminated after one match, 75% after 2 and 87.5% after three. The disparity between the experiences of the more and less successful competitors grows the more rounds are required to reach the final. The pyramid system is also a poor way to find a genuine top three as the draw of the event can place the best competitors against each other long before the final.

SPARRING

While the same difficulties experienced with the pyramid system in pattern are evident in sparring, a further difficulty emerges due to the contested nature of the event. The best learning experiences are in the closest matches and it's entirely possible the first round matches contain dramatic mismatches. When our learning environment is so challenging and outside our control we recoil and try to protect our egos. This is particularly evident in affluent developed areas where young people don't encounter the type of stress and adversity a physical confrontation can bring in their daily lives. This makes it even more important to have competitors feel like they are at an appropriate competitive level, capable of achieving a positive result with work and application.

SPECIAL TECHNIQUE AND POWER TEST

The issue with both of these events is their binary scoring and single effort competition design. A competitor has one attempt at each skill and it's either a success or a failure. Combined with the fact that tournaments set the entry heights / boards with a view to reducing tie breaks this can mean that for many people the outcome of participating in these events is that you find out you 'can't do them'. There's a big difference between losing a match and walking away without a score. We can recover from losses but crashing out without a score reinforces any self doubt or negativity that might already be present.

SOME SOLUTIONS

There's no benefit to picking holes in something if you can't offer some solutions. With that in mind, I would like to share my current thinking on how we might best serve our developmental athletes and youngsters and help propel them to more and better performances at competitive events.

I will consider each event in turn, offering at least one alternative competition design and in some cases several. Many of these suggestions are tried and tested, either locally in inter-club and regional tournaments, in ITA National Events or from other sports and games with similar needs to our own.

PATTERN

For smaller divisions and competitor numbers a pool system (all play all / round robin) is an effective way to ensure all athletes get multiple opportunities to participate. Each athlete contests one match against every other athlete in the division. Typically, points are awarded based on wins, losses and draws with an additional tie-breaker available in the case of a tie on points at the end of the division. Due to the rapid growth in matches necessary to complete a division, any more than 5 competitors is usually undesirable.

Competitors in Division	Matches
3	3
4	6
5	10

For larger divisions, Swiss pairings can be used in order to allow for a pre-determined number of rounds of competition. In this system, the first round of competition is identical to a single elimination pyramid. Once the first round is completed the athletes are ranked according to their scores (decisions/flags in their favour). The second and subsequent rounds pair athletes with equal scores, resulting in closer contests as the event progresses. If the number of rounds will not result in a clear undefeated winner, and in developmental events this is often unnecessary anyway, a tie breaker based on strength of schedule can be used to determine rankings. An athlete's strength of schedule is the total scores of all opponents faced in the competition, thus a win against an opponent who had multiple wins him/herself is worth more than a win against an opponent who lost all of their matches.

Competitors in Division	Rounds	Total Matches	Undefeated
8	3	8	1
12	3	18	1-2
16	3	24	2

The time taken to run an event according to this system is certainly longer than what is required for single elimination but not unreasonably so, typically having 50% more matches over 3 rounds or 100% more over 4 rounds. As all competitors are active in each round however, excitement is maintained and 87.5% of competitors will typically win at least one match.

SPARRING

As with pattern, smaller divisions can be accommodated using a pool structure, but become unwieldy once more than 5 competitors are present in a division. Double elimination or re-qualification style brackets are very beneficial in striking a balance between the desire for additional competitive opportunities for all participants and the need to complete the event in a reasonable time frame.

The pairing process is identical to single elimination, but while the winners progress through a winners bracket as normal, the losers enter a second bracket. A decision can be made on whether to use full double elimination, where the winners of the A and B brackets face each other in the final for the gold and silver medals or to use a re-qualification method whereby the finalists of the B bracket play off for third place while the finalists of the A bracket contest Gold and Silver.

The maximum number of matches in a traditional bracket is equal to the number of competitors minus 1, whereas the maximum number of matches in a double elimination event is double the number of competitors minus 1 (or minus 2 for re-qualification).

Competitors in Division	Single Elimination Matches	Double Elimination Matches
6	5	11
9	8	17
14	13	27

Of course, it's possible to have different match times in bracket A and B in order to balance the needs of the event with the aim of serving the competitors. The A bracket for example could progress with normal match times of 2 x 2 minute rounds, while the requalification bracket could use a single 2 minute round.

SPECIAL TECHNIQUE

The standard format of competition for international events sets the target heights for each of the techniques (3 for female and 5 for male) and operates on the basis of success or failure of a single attempts at each technique. Success is gradated into a 3 point score or a 1 point score, depending on the angle of deflection of a sprung padded board. The developmental issue with this system is that binary feedback (you hit or didn't) is not particularly helpful in progressing a competitor. Competitors who are capable of exceeding the initial heights often don't need to do so and are therefore not incentivised to train or enhance their capacity much beyond the first setting. Those who cannot yet reach the heights set as an entry level are also strongly disincentivised from competing at all as they cannot possibly score, let alone arrive to a medal position.

It's possible to investigate other sports that have similar events and compare the style of competition and the manner of determining the winner in order to arrive at something that is more developmentally appropriate. For this I will look at the Athletics High Jump and Powerlifting's Squat, Bench and Deadlift.

HIGH JUMP MODEL

This is most suited to events where the individual techniques are contested separately. A minimum entry height is set for each technique that reflects the level of development of the entrants and stage of the tournament. It should be achievable to the vast majority of likely entrants given some training and preparation.

Each athlete is allowed to carry up to two failed attempts at the technique or to pass their attempt until the technique is set at a higher level. Once the technique is successfully scored, the athlete progresses to the next incremental height. If the entry height has been chosen well, 5cm increments should yield clear medallists after 3-4 rounds.

POWERLIFTING SBD MODEL

This is most suited to events where the techniques are contested together. An entry requirement is set, being the total height jumped for all 3/5 techniques. For example, based on the current heights for World Championships the senior female Total would be 560cm (220+200+120).

Technique		Senior Female Height
Twimyo Nopi Ap Cha Busigi	Flying High Front Kick	220 cm
Twimyo Dollyo Chagi	Flying Turning Kick	200 cm
Twio Nomo Yop Chagi	Flying Overhead Side Kick	120 cm

The Total chosen by the organiser would be appropriate to the level of the competition and the expected level of the entrants. Competitors would submit their opening attempts for each jump, being free to choose any total they wished as long as it exceeds the minimum set by the organiser.

Technique	Organiser Total - 510	Attempts - 540
Twimyo Nopi Ap Cha Busigi	Flying High Front Kick	215 cm
Twimyo Dollyo Chagi	Flying Turning Kick	190 cm
Twio Nomo Yop Chagi	Flying Overhead Side Kick	135 cm

Any successful jump is credited to the athlete's total, with top placings determined by totals. In the event of a tie breaker being needed, athletes would choose which technique to raise and by what amount (in increments of 5cm). The scoring of the tie breaker therefore is based on the increase over the initial total rather than comparing techniques directly. I.e. Competitor A increased the flying overhead side kick by 10cm while competitor B increased the flying turning kick by 5. Assuming both are successful, A wins the tie break.

The advantage of a Total based system is that all competitors can score a successful attempt based off their preparation, giving them a measure of their current ability relative to the field and the international standard. They can also measure their improvement in competition as well as in training. As a side benefit, there is potential for excitement and gamesmanship as the attempts are selected. Should you push to your maximum and risk a miss or go for a safer total but risk being outjumped?

POWER TEST

The manner for adapting power test should be very much in the same vein as the adaptations for special technique with some small additional considerations. The organiser should set the entry totals per division as with special technique, but as the nature of the re-breakable boards is such that it is difficult to have meaningful increments using only standard white boards, we need to consider the tools available to us to allow incremental progress over time, particularly for junior competitors.

Technique		Senior Male Boards	Junior Female
Ap-Joomuk Jirugi	Forefist Front Punch	3	
Sonkal Taerigi	Knifehand Strike	3	1
Yopcha Jirugi	Side Piercing Kick	4	2
Dollyo Chagi	Turning Kick	3	1
Bandae Dollyo Chagi	Reverse Turning Kick	3	

As we can see from the above, the number of boards required for a senior male competitor at World Championships allows far more room for a graduated approach than the Junior Female requirement. To address this, the use of boards with different standardised break strengths would be encouraged (eg. PNP Breaking Board range). This would allow 'in between' levels of difficulty to be selected, using a half strength board if required for Junior Female or as a step down from a 1 board break and using a higher strength board as a step up that is easier than adding an additional white board.

Technique	Organiser Total – 11/3	Boards Selected SM	Boards Selected JF
Ap-Joomuk Jirugi	Forefist Front Punch	1.5	
Sonkal Taerigi	Knifehand Strike	2	0.5
Yopcha Jirugi	Side Piercing Kick	3.5	1.5
Dollyo Chagi	Turning Kick	2.5	1
Bandae Dollyo Chagi	Reverse Turning Kick	2	

Another consideration when promoting development in power test is the protection of the striking tool, particularly for younger competitors, but as a general rule when the primary goal is training or development. The simple expedient of adding a thin foam pad to the front of the boards can make an enormous difference to the repeatability of strikes and to ensuring the lowest possible number of in competition injuries.

SUMMARY

Tournaments mean different things at different developmental stages. The World championship is about determining the best in the World on a particular day. Everyone knows what they've signed up for and a certain brutality in the eliminations to reach the finals is ... good! It makes the event what it is. For development purposes though, the experience has to be different and that means that from the outset the thinking behind the event design has to be different too.

Development begins with beginners, novices and most often with young people BUT more advanced competitors also need events that are focused on development to enhance their training. Team sports play 'friendly' matches. Individual sports have test events, closed events and alternate formats. Many Taekwon-Do instructors are horrified at the idea of breaking from the traditional formats but happily enter a sprint Triathlon or Duathlon and talk of training for an Ironman.

For our sport to grow in terms of participation, to serve the widest community possible and to offer each individual the best chance of reaching their competitive potential I think, as competition organisers, we need to look at our offering and consider who we're organising the competitions for.