

Judo Ron 51- Increasing speed and accuracy in judo

I have often referred to the SHIN GI TAI components of Judo. These elements are essentially the mental abilities, the technical “*savoir-faire*” and the physical mechanisms employed to perform well. In my article JUDO RON 30, I have briefly addressed the SEN NO SEN a phenomenon associated with the mental training in Judo.

Aim

In this article, I will demonstrate the relationships amongst these three elements by describing some methods of developing anticipatory abilities in order to increase both the speed of execution and the accuracy of judo movements.

Wanting to win is not enough; you have to lead by taking the initiative.

An overview

There are many researches that have confirmed that judoka possessing superb quickness has had a decisive advantage over opponents who, in competition, have reacted and moved more slowly. It confirmed that being able to move quickly is essential to reach top performance. If the judoka is not at the right place and at the right time, he cannot efficiently execute his Tokui Waza and gain superiority. Similarly, when impeded by slowness, he cannot make efficient use of the counter techniques as he may have practiced during Randori.

Physical speed

There are three elements involved for attaining the desired speed: the mental quickness and the physical approach combined with the appropriate technique. Physical speed is normally defined as the quickness of movement of a limb, whether this is the legs or the arms of a judoka. Physical speed as an integral part of the judo performance is influenced by: the judoka’s quick mental response, the choice of the target, his mobility, his endurance, his basic strength and by the technique he chooses.

We normally develop the physical speed through the application of various techniques of sprinting first rehearsed at slow speeds and then transferred to runs at maximum speed over set distances and times. This chosen gradation ensures proper warm up of the muscles and joints groups, increase endurance, provide opportunities to correct the running technique and influence the stride length needed to reach an upper speed level.

“If you think you can win, or think you can’t win...you are right.”

Henry Ford

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

When should physical speed work out be conducted?

Will you be capable of reaching your selected target destination on time? It is important to remember that the improvement of running speed is a complex process controlled by the brain and nervous system. In order to move more quickly, the muscle groups have to contract more quickly. The brain and the nervous system have to register the actions and the associated images and then, it has to learn how to control these faster movements efficiently. With repetitive training, the brain will recognize and learn the proper sequence patterns and choose its paths accordingly. The repetitions of “*déjà vu*” situations will speed up the comprehension processes and the time line needed for the reaction to be launched.

We may compare this process with the analogy of playing the same video games over and over. After several repetitions, we can anticipate what is coming next and can predict when and where to engage our next move. The Judo combat activities are similar; one has to experience repeated conditions and situations from which the acquisition of quickness in movement becomes possible and desirable.

Reaction speed drills

During a standard judo training session, physical speed training is normally performed after a period of rest or following the warm up exercises. Short distance dashes of 20-30 meters are repeated 10 to 12 times followed by the needed recovery periods.

Another proven exercise used to accelerate the reaction time is to have the judoka start a quick run with a start point from a variety of different positions e.g. lying face down, lying on their backs, in a push up or sit up position, kneeling or seated. The teacher standing some distance away from the group gives a signal for everyone to jump up and run towards him/her at slightly faster than race pace. A variation of the former is to have the teacher stand at different locations so that the judoka are forced to alter directions quickly once they begin to run. Speed reaction drills can also be conducted whilst trying to control an item e.g. football, basketball, hockey ball with either their feet or hands.

The values of these exercises and similar ones have been well documented in the work "*Mental Quickness Training Drills*" written by Gregg M. Steinberg, Wayne M. Chaffin and Robert N. Singer who indicated that:

"While quickness training has been addressed in physical education literature, this body of knowledge has focused primarily on the physical dimensions of movement. Two such physical components, foot speed and hand speed, have been highly represented (Bompa, 1994). For example, to promote speed of foot, Bowerman and Freeman (1991) recommended sprinting drills involving very short bursts of very fast running. Etchberry (1994) also suggested activities that include quick starts and stops to develop foot speed as well as good balance. Another interesting exercise was promoted by Sweeting and Wilson (1992) who have suggested drills in which the player shadows the movements of a fellow player as a method to enhance both hand and foot speed."

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

Seven steps speed training model

Seasoned teachers have several training routines to choose from. I have chosen to summarize most approaches prescribed by various sports authors with the schema provided in the seven steps model as recommended by Brian Mackenzie a renowned sports coach of the United Kingdom:

1. Basic training to develop all qualities of movement to a level that will provide a solid base on which to build each successive step. This includes programs to increase body control, strength, muscle endurance, and sustained effort (muscular and cardiovascular, anaerobic and aerobic).
2. Functional strength and explosive movements against medium to heavy resistance. Maximum power is trained by working in an intensity range of 55 to 85% of your maximum intensity (1 RM).
3. Ballistics to develop high-speed sending and receiving movements.
4. Plyometrics to develop explosive hopping, jumping, bounding, hitting, and kicking.
5. Sprinting form and speed endurance to develop sprinting technique and improving the length of time you are able to maintain your speed.
6. Sport loading to develop specific speed. The intensity is 85 to 100% of maximum speed.
7. Over speed training. This involves systematic application of sporting speed that exceeds maximum speed by 5 to 10% through the use of various over speed training techniques.

“Even novice can train their brain to react more quickly.”

Robert Singer, sports psychologist

Note: This article contains copyrights © and is registered with the Canadian Electronic Bank of the Canadian National Library. It may not be reproduced for commercial venture without the permission of the author. For more information please send your inquiries at: RonaldDesormeaux@gmail.com

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

Mental quickness training/anticipation

It is relatively easy to find examples depicting physical speed training. On the other hand, the judo and sport literature has very little to offer as to teaching techniques focusing on the mental quickness training.

However, it is generally accepted that mental processes may add more to the overall speed in most sports than the incremental physical components. With Judo, one such mental process that may significantly contribute to the overall quickness of the judoka is the capability to anticipate an opponent's next action.

You need observing what goes around you and thinking ahead of what are the options or impeding reactions.

Anticipation training

We normally define anticipation as the ability to foresee or expect something to happen. Many people equate this with guessing or taking a calculated risk. In judo, however, anticipation is the ability to foresee and respond instantly to the opponent's movements.

Ancient masters have demonstrated that with a strong inner sense of composure and balance, anticipation occurs simultaneously with the decisive action. It is not simply a matter of pre-thinking, but rather making use of past knowledge, observation, and preparation to respond to an opponent's movements. Considering that in combat situation, the opponent's attack may happen very quickly, anticipation becomes a powerful asset to have.

Do not dwell on negative things. Turn them into something positive. If you never do something because you are afraid or nervous, you will never outgrow your fear.

When we observe high level championships matches, we note that seasoned Judoka rarely go for the IPPON technique in the first 30 seconds of a match. They instead use their first moments to study and draw their opponents into a favorable position before attempting their Tokui Waza. This is a crucial period which may well decide the outcomes of the match. It is imperative for judo coaches and teachers to seek new ways of training their students during Randori exercises in order to practice and maximize their skills of anticipation, think quickly and act more effectively.

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

Anticipation is not so much reacting to the upcoming techniques of the opponent by narrowing down the forthcoming gestures to one or two likely possibilities. The objective of anticipation is to determine, on a probability basis, what the opponent is likely to use or do before they happen. For instance, can it be determined where the judoka will attack? What are his abilities to move to the right, the left, of making use of a combination of techniques or which maneuvers are most likely to provoke or prompt your reaction?

Anticipating the likelihood of such tactics can facilitate the general performance in a number of ways. Judoka can move to another area where the risk level is lower or profit from the advanced knowledge to better prepare his counter technique. However, when one is capable of moving before the opponent makes his move he gains that extra split second to better position himself and be at the right place and on time to execute his defensive or counter maneuvers. Anticipation can also be used by the judoka to prepare his own tactics thus benefiting from extra time before the opponent realizes what is going on. This kind of enhanced readiness should lead to a better and successful performance.

Teaching approaches for anticipation skills development

I have found over the years that practicing Uchi Komi does provide an element of repetition where judoka forge their image of a given technique and that the Nage Komi exercises offer the added occasions to apply such technique at random when no opposition is offered. Judoka and teachers need to explore additional combinations of training drills that will further develop the skills associated with anticipation.

Mental strengths are learned habits

As much as possible, these modified training sessions need to build curiosity and expectancy. It is not always an easy task to accomplish. Maintaining the attention of the judoka throughout the training workshop is one of the many challenges to be overcome. A variety of approaches are needed. Experimentation can be done with the practice of unorthodox physical drills, situation analysis, various action-reaction sequences, viewing films and videos of players in action. Other elements that can sustain the curiosity of the students and introduce some novelty in the training session should be pursued. In addition to using qualitative and interactive training methods, the specter of monotony has to be challenged with lots of imaginative exercises.

I have noted that practical sessions need to be reinforced with visual presentations depicting current judo performances which expose different approaches and problems. The explanation or discussions around these various presentations need to arouse the curiosity of the judoka, stimulate his enthusiasm and create sufficient excitement for him to pursue additional researches.

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

Judoka need to understand the goals of each practice or drill. Like many other judo teachers I try to define the aim or subject matter at the beginning of the presentation or exercise. After a successful presentation of sample techniques or combinations of what is desired, I allow sufficient time to practice what is at hand and then, at the end of the session, I summarize what has been achieved.

I also noted that when a teacher or coach summarizes what he/she has just told or demonstrated to his audience, it will not only help to verify whether the objectives of the training session have been met, but will also assist the class to inquisitively recall what has been learnt. The employ of small quiz during or after the presentations has demonstrated that they can serve to open the mind of the students towards other possible solutions and they frequently can respond with lots of imagination.

To develop mental strength, the students need to understand the rules and making of game and recognize what level of energy he or she need to supply and when. Reinforcement of the learned judo experiences must be followed with discussions, demonstrations, readings on technical subjects, watching others and most of all by practicing as often as possible. It is in the various drills associated with combat situations that the Judoka must find the proper time to listen, observe, analyze and focus under pressure in order to better manage their energy.

“To learn and then do, is that not a pleasure? Saying of Confucius, book VII

Familiarity and anticipation

My experience has demonstrated that there are commonly two distinct ways how the judoka can employ good anticipation to improve his reaction time and his accuracy during combat:

1. The judoka anticipates the opponent's tactic and **prepares the right response** (or possible responses) in his mind a split second before the opponent makes his final attack. Thus when the opponent makes his moves, the experienced judoka is prepared with a series of alternatives and can counter them immediately.
2. The judoka can also anticipate the opponent's **moves even before** the later has begun to formulate his tactics and show preliminary outward signs. This kind of combat intelligence is displayed by the most matured of judoka. A more common variation is seen when judoka are facing opponents who are slower than they and that the sequence of Kuzushi-Tsukuri and Kake are not coordinated. Such is the case when the Tsukuri is not following the Kuzushi, or when the opponent has moments of hesitation before he enters into the right Kake.

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

3. There is a third way associated with **intuitive preparation** which is rarely seen nowadays. That is the skill of presenting such a strong self- image that it will introduce an apprehension and panic expressed by a so called fear factor that will disable the opponent motivation to engage the combat. This attitude can be summed up in the words of Sun Tzu: ***“To win 100 battles with victories is not the highest skill but to subdue the enemy without fighting is the highest of skill”***

One can see in those examples that the main benefits of possessing good anticipation are the shortened reaction time and the high state of readiness to accept or negate the oncoming technique. It becomes evident that when you have more time to observe and judge what the circumstances are, the more likely you will be able to profit from them.

Perfection is for most, the result of sustained practices and accrued improvements.

Finding the opportunities

Accustomed to making given sets of techniques as they are first introduced, most beginners (and some intermediate level judoka) lack experiences and opportunities to reproduce the techniques of choice to fit their style and personality. They copy one or two ways and never have the time to experience the true potentials of the given techniques when performed from different positions, in odd postures, from diverse angles and with uneven spacing. They are too concerned to do the technique as showed too venture into more experimentation.

To alleviate this weak phenomenon and to realize other possibilities, they need to build a greater mental repertoire and be exposed to different patterns. Beginners alike the more matured judoka have the requirement to practice as often as possible with different partners and randomly try different approaches.

“The highest form of generalship is to balk (counter attack) the enemy’s plan.”
Sun Tzu. The Art of War, (118)

How anticipation works in our mind

Repetition and exposure are fundamental to the progress of acquiring greater anticipatory skills. When we anticipate the opponent's offensive or defensive tactics, we actually develop possible scenarios stored in our memory. These *“déjà- vu”* events will facilitate the recalls of adjoining circumstances and improve both the timing and speed of our reaction. If we cannot and do not anticipate, we are left with no readily made solutions as we cannot discern the most likely tactics of our opponent. Empty handed or without a clue, we are bound to react at slower speed and use the wrong weapons. Unfortunately the opportunity to make intelligent use of energy will be lost.

“If you know the enemy and know yourself, you need not fear the result of a hundred battles”

Sun Tzu. The Art of War (132)

Let us compare the above situation with how a computer program can assist us in our work. If you load a program from the hard drive - let's say you start your Email application; it will take quite some time to fully load and be ready for use. But if you minimize it after your preliminary usage and go on to work with other programs or applications for some time and then decide to return to your mail services and you click on it again. You will note that it will load very quickly and be ready to use almost immediately. That's because the email application was already prepared in the memory (RAM) of the computer. And RAM is much faster than the hard drive.

We have to understand that the effects of anticipation work exactly the same. If we do not "load" any possible scenarios or “déjà vu” situations with potential solutions to our mind (RAM), we will be forced to load them from scratch or from deeper levels of consciousness (hard drive) and that does demand more time. Our reaction time will be much slower.

Events and images are not instantly available in a mental repository; they need the organization and storage near different channels of paths of communication. Anticipating your opponent actually requires a lot of mental effort. Your brain must constantly "pre-load" possible intervention scenarios from each combat situation. You need to store lots of information and images to make the necessary mental trails by which you will be able to respond quickly without losing yourselves in odd thoughts. That's why many judoka do not take the proper time to practice it. For those seeking immediate gains, it may represent too much effort. For those who seek to perform better over a longer commitment, this effort has to be renewed over and over again until it eventually becomes automatic.

***“A clever fighter is one who not only wins but exceeds in the winning with ease”...
He who only sees the obvious wins his battle with difficulty, but he who looks below the surface of things, wins with ease”***

Sun Tzu. The Art of War (139)

“Many calculations lead to victory. Few calculations...to defeat”

Sun Tzu. The Art of War. (128)

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

Suggested training to develop your anticipation skills

Hereunder, are several proposed techniques used in the development of anticipation skills.

1. When learning a fundamental technique, try to capture the key elements and then seek to understand why there are so many variations performed by different judoka.
2. When practicing your techniques ensure that you perform them from the left and right positions.
3. Perform selected techniques from an advancing or retreating advantage.
4. When doing Uchi Komi or repetitions with a partner, ensure that you observe the entry forms and the body responses. Alternate and vary your entries.
5. In Nage Komi exercises take the time to observe various displacements and techniques to link the Kuzushi with the Tsukuri before the throws.
6. When doing static revision of techniques, ask the partners to complete the techniques using different Kumi kata.
7. When watching the performances of others, practice identifying the various classifications and variations.
8. Practice different ways of entering and closing a specific technique.
9. Ask your partner to perform different techniques and study the numerous approaches.
10. Take the time to attend various Shiai and or watch videos and films or read technical books about how techniques are performed at different levels by known experts.
11. During Randori, call your technique in advance and observe the ways your partner/opponent's prepares his counters, how he moves to receive it and what first reactions occur.
12. Find all possible occasions to rehearse and repeat technical combinations and variations.

Do not forget that the most important type of anticipation during a judo match is our ability to predict opponent's patterns of tactics and strategies.

We become better at anticipating with every occasion we allow us to observe and later recall the various patterns of entry or reaction. When we assimilate this kind of intelligence, we are better equipped to understand how the game is conducted. There will be fewer surprises: the opponent's strengths, tactics and strategies will be better understood and his weaknesses identified.

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

Searching for key patterns

The key to learning and anticipating these various patterns is to look for them. It may sound simple and it is – but so many judoka become overwhelmed by the actual situation and by the pressure of the moment that their mind just goes blank. They remain confused as to what to do and can only think of reacting as best they can. Too often by gripping onto the back of the opponent or by using extra energy they will try to resist the throw. In such an entanglement, they are unable to think clearly and process the information with required speed. They are in a casual state of panic and will not recover until it is too late.

In a confrontation, it is important to maintain composure and be able think clearly. We need the capacity to swiftly assess the situation and define the appropriate actions. In judo, quickly defining the offensive or defensive patterns is essential to apply the most intelligent ways of using the energies of both players.

Anticipation skills in judo also comprise the habits of observing and following the potential opponent's state of preparedness and experience before a given match.

During a pre-match quick assessment, you need to focus on the overall situation and not try to stare directly at the opponent. Watch the ways he warms-up, the preferred angles of his moves, the general physical features, the signs of injuries, the entourage etc. The newly gathered information elements at that moment are critical for your brain to record the other more recent and pertinent information which will be subconsciously processed in the mental storage bin.

If you know very little or are unable to follow the career of your potential opponents, you may use other composite knowledge gathered by competitors or coaches who know the individual. You can use your coach and entourage to do some scouting on your behalf.

By gathering their additional information, you are basically taking a shortcut. Instead of being confronted to make a late assessment of your opponent's tactics during the match, you have someone else involved in watching him perform at different times and places and looking for and reporting the patterns that keep repeating. That way you'll know what you can expect when your match starts and you'll again be able to anticipate what your opponent will likely do.

“A good general can secure success by modifying his tactics to meet those of the enemy.”

Sun Tzu. The Art of War. (164)

ZUIHITSU- RANDOM NOTES on JUDO by Ronald Désormeaux

Conclusion: The Power of Anticipation

Developing the skill of anticipation will give you the opportunity to take control of your combative game. The principle of looking ahead to see what can be usefully and intelligently deployed is applicable to any context. If you are always planning your action based upon the immediate events, it is likely that you will be constantly chasing for a worthwhile solution.

I repeat, if you go into a combat situation without having proper experience or practice and you lack proper intelligence of how to deal with either the opponent or the situation, you will likely be at a loss as to what solutions or actions to summon.

Enhancing anticipatory skills takes a long time to achieve. Anticipation is the key skill that brings your judo acumen to a higher level. If you don't anticipate well, you'll react late and you will constantly fight in a vacuum. Keep your mind open and practice getting better at reading your opponent and you will eventually find out that there's actually more opportunities for you to take up the initiative at the decisive moment.

The power of anticipation is amazing. Judoka must seek to enhance it. They have to learn to employ it on a regular basis should they seek to reap the benefits of a successful venture. It is my hope that your personal efforts will change the way you do judo.

Have a good training session.

Ronald Désormeaux, Judo Teacher, Hart House, University of Toronto, February, 2012

References

Walker Isabel, *Training for Speed, Power, Strength*, Peek Performance, www.pponline.com

Behnke Luke, *Mental Skills Training*, Online Journal of Sports Psychology, March 2004

Pye Jonathan, *Coaching Young Athletes*, www.pponline.com

Leberre Jacques, *Le Randori*, Stage Béthune, June 2000

Kano Jigoro, *Mind over Muscle*, writings from the founder, compiled by Naoki Murata, Kodansha International, Tokyo, 2005

Sun Tzu, *The art of War*, translated by Lionel Giles, Gutenberg Project, 2007

Rosso C, Fremont S, *Les cahiers de l'entraîneur No 2*, INSEP, France, Fall 2006

Désormeaux Ronald, *Discovery of Judo's Arsenal: Shin-Gi-Tai*, Limited Edition, August 2008

Mackenzie Brian, *Seven Steps Training*, Sports coach web site, WWW.BrianMac.co.Uk