

Martial Art Training: Middle-Age and Beyond

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Introduction

You know you are different – and it is true. As a martial artist, athlete or anyone beginning a journey towards improving oneself, or continuing that journey, it is typically very apparent your capacity for a given activity changes over time and is affected by your age. As a child, you may be small and light and have very limited exposure to technique or experiences to guide your expectations of your own potential. Matched to these youthful limitations may be abundant energy, great enthusiasm, and fast work-out recovery and healing. A younger adult athlete or martial art practitioner may have a full grown frame, power far beyond that of a child, and an intellect and awareness to execute at a high level. Still later in life experience, maturity, composure, and determination are typically very apparent and may counterbalance limitations that can begin to diminish physical abilities. Even later in life, physical limitations may be more pronounced and overall physical abilities diminished. At these later stages – the reason for training and focus areas for growth will more than likely have transitioned. Goals that are more common at youth that might include, kicking hard, winning a tournament, or being particularly fast may have transitioned to focus on maximizing fitness, sharing community and friendship, mentoring and sharing with other enthusiasts, and much

more. The continuum of capability, learning, and expectations, change from one time period to the next and over the decades of most lives. Regardless of these changes and stage of life, fundamental tenants of martial arts training are always apparent and valuable. At a simple level and at each stage of life one will be able to enjoy those days when they are lost in their training, completely focused and flowing through a workout having the greatest fun and experience, while at the same time continuing to learn about oneself. Martial arts broadly and taekwondo in particular can provide a profoundly enriching experience and foundation for being the best person one can be throughout a lifetime and at each stage of life -- in addition to positioning one to experience profound enjoyment, great fun, fitness, and wellness on an ongoing basis!

Martial Arts / Taekwondo – Context for Aging

Martial artists are very fortunate to be exposed to both a philosophy and system that promotes their well-being and optimization at every level and across the stages of life. As Dr. Ken (Kyungho) Min and Dr. Russell Ahn have explained to generations of martial artists – martial arts is a lifestyle and a way of being. Martial arts training is expected to permeate everything a practitioner does and is ever applicable and may be even more valuable at later stages of life and older ages.

According to Mr. Marc Tedeschi, "Virtually all martial arts are composed of a philosophy linked to specific physical techniques."¹ The philosophy of the martial art then defines the purpose of the art, fundamental beliefs, moral values, aesthetics, philosophical

principles and technical principles. He goes on to describe taekwondo as a Korean martial art characterized by powerful hand strikes and kicks. Mr. Tedeschi continues that, "...Taekwondo emphasizes the unification of mind, body and spirit: the perfection of human character, social responsibility; and the appropriate use of force."² He also points out that taekwondo's core techniques and innovations in this area have a basis in science and lessons learned through sport competition. Mr. Tedeschi outlines primary principles or "Tenets of Taekwondo" that are similar to those stressed across most societies, cultures and traditions: Courtesy, Integrity, Perseverance, Self-Control, and Indomitable Spirit.³

Taekwondo's applicability and significance to any practitioner is clearly expansive and provides a foundation for a person's life and belief system. Practitioners will endeavor to appreciate, maximize and improve in all areas. Taekwondo practitioners or indeed any person that subscribes to such tenants are likely well positioned to be strong and positive members of their communities and also generally well positioned for success in their life. As people age -- grow, change, and evolve through life -- their life focus areas change. For martial artist this is similarly true -- but likely with an even greater degree of awareness, fitness, appreciation and well-being.

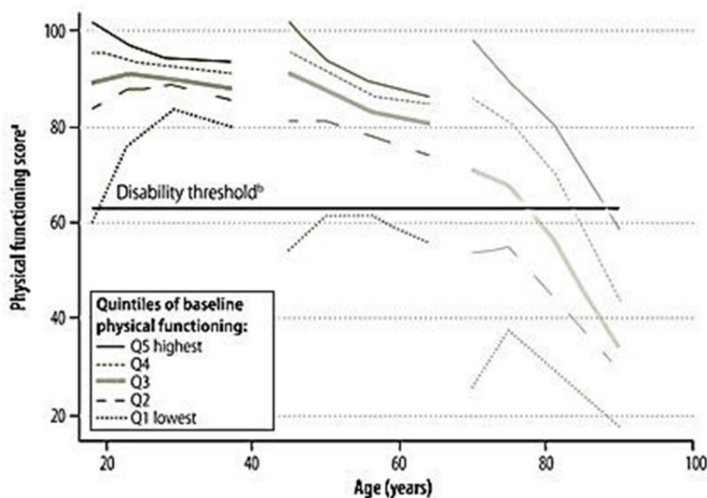
Why Train? – or Continue to Train?

For the elite aging athlete -- "...it comes down to keeping the body healthy enough to unleash the more important advantages of the mind: experience,

discipline, tactical nous, (and) emotional stability.”⁴ With greater experience and awareness being older can provide key advantages over often less experienced and younger competitors. Examples abound of the extended career professionals who may not have the physical capabilities they once may have had – but still find a way to win in their respective category. A love, “respect for the game,” and high-level of joy and fun are also very important for long term success.⁵

Beyond elite and competitive athletes, simply and unscientifically said, humans need to “use it or lose it.” This concept applies to the whole human, both mind and body. From Geeske Peeter’s research (see Figure 1, below) we can see that physical functioning scores generally broaden as one ages, and those in the lower quintiles can fall beneath the disability threshold sooner. The disability threshold is generally the point at which a person needs help with daily activities and care.

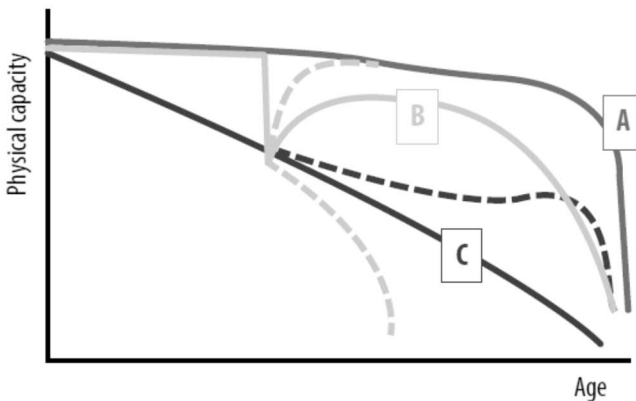
Figure 1



People with lower peak functional capacity reach the disability threshold sooner than those who start with a higher peak functional capacity. The motivation seems clear to maximize one's physical functioning throughout life to benefit from the well-being that comes from being fit, and to better control and delay declines that ultimately impact everyone. Physical activity can add about 15 years of life before hitting the disability threshold.⁶ When considering hypothetical trajectories of physical capacity (Figure 2) that for an individual and broadly for society it is profoundly better to have individuals on an optimal trajectory of high capacity until end of life.⁷

Figure 2

- A. Optimal trajectory, intrinsic capacity remains high until the end of life.
 - B. Interrupted trajectory, an event causes a decrease in capacity with some recovery.
 - C. Declining trajectory, capacity declines steadily until death.
- The dashed lines represent alternative trajectories.



Many variables impact wellness and physical capacity throughout life. These variables include:

1. Genetics that we are born with which often correlate to risk for disease and other health impacts, both positive and negative.
2. Environmental factors that include economic factors, race, class, gender (how given environment responds or stresses individual), and social/community amongst others which can for instance increase or decrease risk for accidents, exposure to pollutants and toxins, etc., or provide a supportive environment to thrive.
3. Lifestyle and choices an individual makes that include healthy or unhealthy food decisions, focus on fitness or less so, smoking or not smoking, and so on.

Individuals have extremely limited control over genetic predispositions, and only limited control over environmental variables imposed due to economics or other circumstance. To the extent that lifestyle and individual decision making are normally the most available and controllable variables for well-being, they can and often are prioritized for action. From Figure 2, the optimal trajectory (labeled A) for physical capacity typically correlates to people not predisposed to medical problems (healthy genetics), living in healthy and safe environment, and making good life and health decisions to maintain and extend health. An individual with an interrupted trajectory (labeled B) has experienced a medical crisis of some sort. Those in this category can have greatly varying outcomes and trajectories after the initial interruption. The declining trajectory scenario (labeled C) typically represents suboptimal situations

for many or all dimensions that dictate overall health. A history and trajectory of declining health also typically limits the capacity to change or reach optimal physical capacity for a given age or stage in later life.

Adjusted Expectations

Whether taking up martial arts for the first time in your 30's, 40's, 50's or later still – or continuing training that began long in the past – the act of engaging and training is likely more important and valuable than anything related to specific technique or form of martial arts activity. “Showing-up” physically and mentally to train is fundamental, and likely the most courageous act of the training experience. Being receptive to upside and positive results is always appropriate – but it's also important to appreciate your capacity and the context for your training. If you have been a strong or elite athlete or martial artist at earlier stages of your life it can be challenging to manage your own expectations for yourself, relative to your current capacity and age. Tanaka and Seals outline training for older athletes as follows:

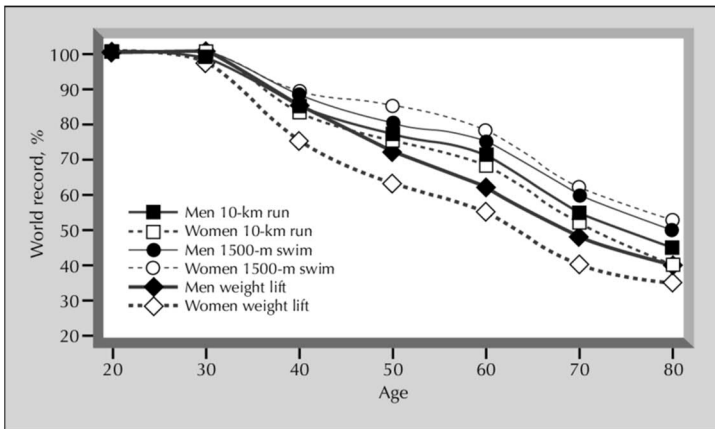
“The number of healthy older individuals who are active in sports has increased significantly during the past generation. These individuals continue to perform at a high level, although there appears to be a loss in functional capacity that cannot be overcome by training. No accepted theory of aging exists, but older athletes may be limited primarily by the inability to maintain the same volume and intensity of training. Also, older athletes appear to respond more slowly to the same training

load than do younger athletes. The principles of training in older athletes are similar to those in young athletes; however, additional days of recovery and cross training may be necessary to prevent orthopedic injuries. Strategies for maintaining exercise intensity, including resistance training, are advisable to prevent sarcopenia and selective loss of type II muscle fibers.”⁸

Tanaka and Seal also provide an analysis of performance losses in relation to age in master athletes including both cross-sectional and longitudinal data (represented in Figure 3):

“Little loss in performance ability has been documented in athletes before they reach their mid 30s, although athletes commonly report more difficulty in avoiding injury or persistent problems related to prior injuries as early as their late 20s and early 30s. From the mid 30s to about the age of 60 years, a slow but progressive loss occurs in performance ability. Beyond the age of 60 years, an accelerated loss in performance ability has been observed even in athletes who are able to maintain training volume and intensity. A larger decrement is apparent in the performance of female athletes, the cause of which is unclear. Given the loss of the anabolic hormone-related advantage of men with aging, common sense would argue that men and women would respond in a more similar manner to training as they age. That this is not the case, and that women actually deteriorate more than men, remains a topic of research interest. Similar findings have been observed for weight lifting, power lifting [18], and rowing [19].

Figure 3.

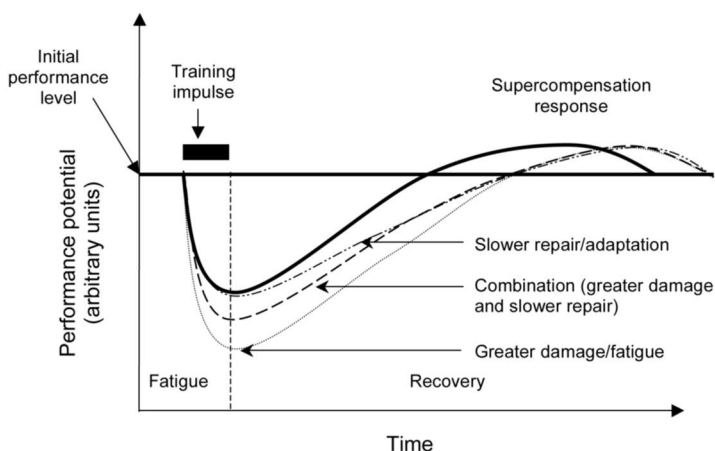


If you felt like you were “losing a step” against the younger adult and elite athletes, or compared to the younger version of yourself – you are! How you manage and account for the new you is critical from that point: in determining whether you stick to the training regime and if you are happy doing so. Examples from mainstream popular sports abound where aging athletes transition to new roles. Using basketball as an example, the new role may come with reduced minutes for playing time, more specialized focus — for instance on defense, or shooting — or generally as a leader and mentor for younger teammates both on and off the court. The goal of staying productive and supporting the community continues even after players transition beyond the playing stage of their careers where they may represent their team or organization in other capacities as team representatives, coaches and more.

Minimizing Injuries

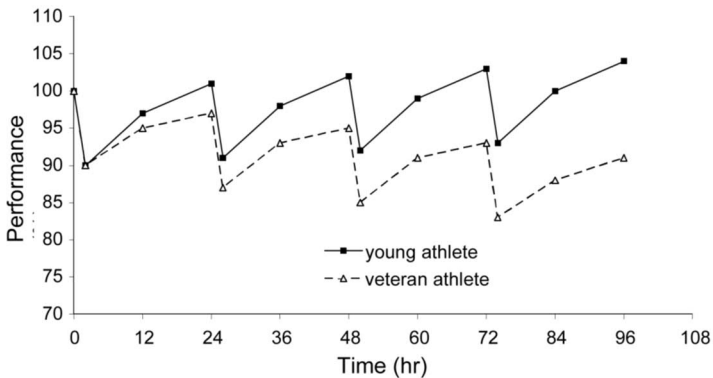
Regardless of age or stage of life, a key factor in martial arts learning and growth is staying injury free or minimizing injuries once they occur. It is much better to have consistent and progressive training than a pattern of health and heightened intensity that is repeatedly broken by injury setbacks. Figure 4⁹ depicts a theoretical model of the time course of adaptation after an exercise impulse comparing younger athletes to older athletes. The bold line denotes normal athletic model while dashed lines represent proposed models for an aging athlete experiencing greater damage or slowed recovery.

Figure 4.



The older athlete generally shows greater fatigue and a slower recovery. Figure 5 (below) illustrates a hypothetical training response in young and veteran athletes demonstrating the progressive overreaching response in the veteran athlete because of an impaired rate of recovery from fatigue after training sessions.¹⁰

Figure 5.



According to Fell and Williams, "The concern for aging athletes is that the time taken for muscle to repair and recover after fatiguing exercise or exercise-induced damage might be longer than for young muscle, slowing and potentially limiting the adaptation response."¹¹ Figure 5 illustrates a concern for most aging athletes to optimize training levels and to be particularly sensitive to the potential of "over-training" or diminishing performance of capacity by training too much. Over-training often is a precursor to an explicit injury episode — beyond simply feeling run-down or worn-out from excessive training. Kallinen & Markku explain:

"Illness and aging both cause many structural and functional alterations in the human body, rendering elderly people liable to overloading of the musculoskeletal and cardiovascular systems... Most physically active elderly people are selected individuals with respect to their superior health and physical capacity compared with inactive persons of the same age, thus making it possible to further improve their physical capacity. They will, however, be affected by some of the drawbacks of physical overloading,

mostly due to the diminished ability of aging body systems to adapt to high levels of loading. The safety margin of an exercise dose tends to decline with aging. Exertional injuries are common among the elderly, and are connected mostly with degenerative aging processes.¹²

For impact sports and martial arts like taekwondo, optimizing training regimes as you age is definitely important, and as you age ensuring you are training safely becomes even more important.

There is an element of risk in any human endeavor and certainly relative to martial arts for an aging martial artist. Knowing damage can potentially be greater and recovery slower for the older martial artist, understanding your injury risk profile is likely more important than for younger martial artists. According to Tedeschi, "the greater the emphasis on self-defense, competition or combat, the greater the element of risk."¹³ Being aware and thoughtful of existing performance capacity including strengths, weaknesses, past injuries and more along with the context of one's training is important. Contextually if one is in a separated class with consistent age group participants with an instructor focused on that group then activities will more easily and consistently stay in a healthy and safe range for that group. If the class is a broad section of martial artists and athletes with diverging skills, then there is more risk potential. Examples of adolescents that have gymnastics style skills for jumps and flips, or the world-class Olympic competitors workouts may be hard and very risky for a 50+ participant to follow without adjustment of expectations and adequate consideration by the older athlete. As Dr. Norman Link has commonly explained over the years "you will want

to be able to get out of bed the next day.” Dr. Link’s comments being primarily aimed at making sure participants are applying good judgement in how hard they train and how forcefully they apply techniques in order to minimize the chance of injury and ensure that each participant is not too sore to get out of bed the next day.

Lifestyle Adjustments

Lifestyle outside of the dojang, the “place of the way”, when one is off the mats is critically important and even more important in supporting a high performance aging martial artist and athletes. What worked in years past for an athlete may no longer work for the same athlete at an older age, albeit the concepts are similar in supporting a healthy lifestyle and effective training.

In particular, getting adequate sleep and rest becomes very important as an athlete ages. Many people do not get adequate sleep; if the committed martial artist or athlete is generally sleep deprived the burden and load of intensive training can begin to breakdown the body and make the individual feel worn-out and likely more prone to injury. Ideally, adequate sleep complements the martial art training regime, so the practitioner has a sense of being tired from workouts and at the end of each day – but not exhausted or worn-out all the time.

In addition to sleep, eating correctly to support daily needs and a committed workout schedule is also very important. The additional caloric requirements to complement the burn rate for the training is

fundamental to staying healthy. Beyond simply eating more, it is critically important that food inputs be of high-quality, with nutritional value to support training and more broadly life demands. According to Kaiser Permanente's Kim Tirapelle, "One of the main things to know is that you need to eat on a consistent schedule. This will give you energy during your workouts and will help your body recover so that you're able to work out again the next day. Consistent means 3 meals a day without skipping meals and not going more than 3 or 4 hours without eating."¹⁴ There also needs to be a focus on pre- and post-workout nutrition. Making time for proper nutrition and hydration before working out and for replenishment after working out is an important part of a good nutrition plan.

Martial arts training is outstanding for providing practitioners an opportunity to appreciate and benefit from what is commonly referred to as mindfulness today. Mindfulness or "the quality or state of being mindful" is defined as "the practice of maintaining a nonjudgmental state of heightened or complete awareness of one's thoughts, emotions, or experiences on a moment-to-moment basis; also : such a state of awareness." The mindfulness experience that martial artists enjoy while training will often permeate life more broadly. This is very important in maintaining appropriate training lifestyle factors that complement the training and learning demands for the martial artist. The self-awareness or listening to your own mind and body, is critical in self-diagnosis, steering clear of injuries and making sure training is positive and most beneficial. Yoga complements these same concepts and martial philosophies very well and can and should be

employed if at all possible. According to Ms. Lily Chou, "...like the martial arts, yoga develops a disciplined mind, body, and spirit, and enhances the connection between all three. It serves as an avenue through which you can observe your body's weaknesses and strengths and correct those imbalances, allowing movement to come more freely and easily."¹⁵

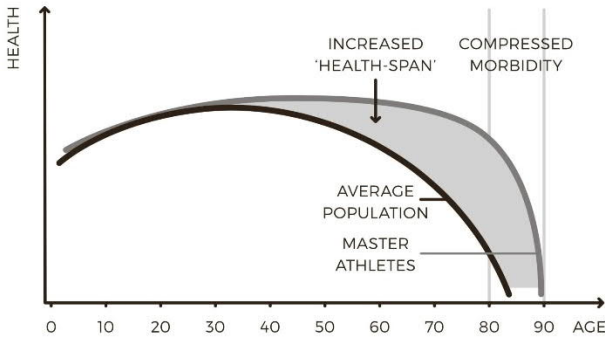
To be successful and healthy as a person generally, and especially as an aging martial artist, it is critical to schedule adequate sleep, maintain optimal nutrition, and set aside time for mindful reflection.

Conclusion

When looking past the period when a practitioner or athlete may have both youthful physicality as well as adequate experience to be at the peak of their ability – prospects may seem limited and diminishing. Indeed, at first look, the idea of thriving as a martial artist, athlete and aging individual may seem bleak, as many of the charts and illustrations illustrate a downward trend for ability and results. Comparing yourself with an elite professional athlete at the peak of their career for most would be a difficult comparison.

When adding 10, 20, 30 or more years to a comparison against young, healthy, full-time professional athlete at their peak is even less valuable: the comparison represents two very different people and situations. Most martial artist learn early on that the key comparison is with yourself — with or without martial arts training. In other words, to compare each individual with and without martial arts training — physically, mentally, and spiritually and considering overall well-being.

Figure 6.



This self-comparison (with and without martial arts training) along with acknowledgment that well-being and supporting an increased “health-span” is a central tenant for a fulfilling life – likely provides the best perspective to make an assessment. Figure 6 illustrates the findings that among masters athletes... the aim that many ... have (is to): maximise ‘healthspan’ by reaching a peak, then maintaining our health, physical and cognitive capacities for as long as we can, compressing ill health into as short a period as possible.”¹⁶ Training as an older martial artist, or more broadly a master athlete presents many benefits, and rewards — few outweighing an extended healthy period of life, and the compressed period of ill or failing health.

Knowing that life expectancy has been growing (in most war-free modern economic regions), along with scientists and researchers saying people alive today may live to 150 years — it becomes important to plan to live longer, and more valuable to live longer healthfully. To the extent that any individual can control their physical capacity from an early age of life forward, one should fully endeavor to do so. Martial arts

and taekwondo align very well in supporting the broad health and self-actualization for any practitioner across the stages of life.

As one ages there will likely be some increase in those days where one may feel tired, slow, and like they may be working harder to get similar (or lesser) results as anyone undertaking the same challenges. It is very important to also know there will be those good days. On the good days when one more easily finds their "flow" or "groove" -- it is clear to the dedicated martial artist (of any age) that there are few activities or experiences better than being a self-actualized martial artist. The foundational tenant of an indomitable spirit for martial artist makes it all the easier to fully enjoy and embrace both the good and the more challenging days! Regardless of which decade or stage of life one is in -- when one finds oneself completely focused in the moment, fully realized and flowing deftly and powerfully across the mat -- one will be reminded they are in the right place and doing the right thing to have fun, grow, and enjoy ones health!

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Endnotes

¹ Tedeschi, p. 18.

² Ibidem.

³ Ibidem, p.50.

⁴ Bercovici, p. xxv.

⁵ Ibidem, p. 137.

⁶ Shepherd

⁷ Ibidem.

⁸ Foster, et al.

⁹ Fell & Williams

¹⁰ Ibidem.

¹¹ Ibidem.

¹² Kallinen & Markku

¹³ Tedeschi, p. 18.

¹⁴ Radding & Tirapelle

¹⁵ Chou, p. 13.

¹⁶ Hewitt