MARIO SCHMIDT-WENDLING Foreword by Dennis Sandig



The Ultimate Training Guide to Winning the Long-Distance Triathlon Triathlon Success

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TRIATHLON S U C C E S S

The Ultimate Training Guide to Winning the Long-Distance Triathlon

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FOREWORD

Triathlon is so much more than swimming plus cycling plus running. During coach's training, we try to teach primarily one thing based on this credo: there is no simple training recipe.

The challenges coaches face is quite apparent, particularly in light of the findings regarding the complexity of human performance on a physical and psychological level. They are experts in sports biology and training theory. They must be as familiar with the 101 of sports psychology as the didactic methodological components of training. Here good coaches distinguish themselves primarily by one thing: an independent training philosophy that allows them to undogmatically search for answers to the many daily questions about training that are right for their athlete.

I first became aware of Mario Schmidt-Wendling early in his coaching career because he had this ability. Close observation of his athletes and the ability to define achievable goals have helped him develop his own training philosophy. He also challenged that philosophy and refined it during his coach's training at the German Triathlon Union during many open and critical discussions.

To this effect, I hope this book will be a starting dive for our readers with an interest in triathlon into developing an independent training philosophy that fits their personal needs.

Next to the many components of training, one thing should not fall by the wayside: the person, the social being, is so much more than the sum of his parts.

Have fun reading and training!

Dennis Sandig

Science Coordinator and Education Contributor for the German Triathlon Federation

1 INTRODUCTION

Really? Another book about triathlon?

I asked myself that question as well when the publisher approached me with this book project. But, it has always been my dream to put down on paper my knowledge and experience from more than 30 years of endurance sports—almost 20 of those years as a full-time professional coach.

Dreams do come true, and so I sat down and wrote what I know. The theoretical principles of training, physiology, and sport already fascinated me as a teenager, and back then I devoured a few books on these topics. I remember carrying around one book in particular, *Alles unter Kontrolle* (Everything Is Under Control) by Neumann, Pfützner, and Hottenrott, in my gym bag for a long time.

The fact that I am now able to publish my ideas, approaches, and principles regarding long-distance triathlons with the same publisher nearly 30 years later fills me with pride, and I feel like I am coming full circle.

A few years ago, I wrote short stories about all things pertaining to long-distance triathlon in the form of a blog for magazines, or rather for the athletes in my care. To me, sharing knowledge was and is a labor of love because



Figure 1: Alles unter Kontrolle (Everything Is Under Control).

as an athlete and coach I, like many other people in everyday life, made some mistakes. But in my view, it is precisely those mistakes that ensure the survival of mankind, because anyone with the ability to self-reflect, recognize mistakes, and use them to make changes will emerge stronger and more knowledgeable. I would like to help as many athletes with the long-distance goal as possible to avoid making my mistakes, develop avoidance strategies, and embark on a less rocky path towards long-distance success.

This book reflects my current body of knowledge and my approaches, which over the years have been put to the test time and again. I don't like using the term *philosophy* as I feel it is used excessively in this context, and I cannot and do not want to claim that I know everything and thus assume to be the keeper of the triathlon grail.

I understand there are completely different ideas, principles, and approaches for how a long-distance race can be prepared and structured. But I am also quite sure that I have found one of these completely different paths that helped a large number of athletes on their way to fulfilling their competition dreams. In doing so, I can point to a wealth of experience from more than 1,200 successful, individually coached long-distance races with countless world, European, and national titles.

As a husband, father, and freelancer, I am aware of the everyday pitfalls and can relate to the fact that next to the sport there is a life outside the triathlon microcosm. With this book I would like to encourage athletes to not take the assertions posted on the internet at face value without thinking. In recent years, I have observed allegedly new trends in training and nutrition, that have been around for years, being marketed as innovations.

I am not trying to lay claim to a scientific work but in the appendix, I will cite several sources on which I based my training principle. Maybe some coaches will also find ideas and tips that can help them in their daily work. I understand some things may rub some people the wrong way and that I will not meet everyone's expectations regarding long-distance triathlon.

Speaking of everyone, in this book I will limit myself to the male form of address, so the text doesn't get too voluminous. As a happy father of four daughters, I will gladly face the accusations of chauvinism, lack of equality, and a lack of respect for the female gender, and hope for understanding from the female readers.

In my opinion there should be no blanket training programs because I see each athlete as an individual, way beyond the sport. Rather it is my wish to teach the principles and basics so athletes can make their own decisions about planning their training. For the sake of completeness, in the book's appendix, I nevertheless included a sample training plan framework for a fictitious athlete to use in the final sixteen weeks leading up to a long-distance event to provide a possible path to success.

I do assume that readers have a certain amount of background experience in the practical and theoretical aspects of the sport, as this book is not intended for triathlon beginners.

I would be very happy if this book inspired reflection and discussion, because that would mean I fulfilled my vision and mission.

My sincere wish is that some athletes will carry this book along in their gym bags as a reference much as I used to do in the past, and in a few years from now, another author writes that I was able to inspire him with this book. In sports there is no real right or wrong. One can and should have differing opinions and experience some friction.

Friction is good and important because, as is well known, friction also produces warmth.

Train hard AND smart!

2 QUO VADIS TRIATHLON?

Triathlon is still considered a young sport. Most triathletes know the story of the three young American marines who, while slightly intoxicated, came up with the idea of the Ironman triathlon in Hawaii just over 40 years ago. Since its rough beginnings, the professionalization of the triathlon has gained incredible momentum, and there is probably no other sport that underwent such rapid development.

When I first saw the images from the Hawaii triathlon in the 1980s, triathletes seemed exotic, their clothing far too flashy and skimpy. The sport quickly shed its reputation as a fringe sport, and with its inclusion in the Olympic program, sports associations worldwide received financial backing from their government. The German Triathlon Union (DTU) is a permanent part of the German Olympic Sports Confederation (DOSB) and is the umbrella organization with the largest membership worldwide.

I have always been fascinated by an openness to new things and the irrepressible drive for innovations in triathlon. But not every innovation was and is permanently successful. Some disappeared after just a short period of time.

Things like, for instance, the seat shifter, that allowed the rider to shift the seat horizontally and made it possible to adjust the sitting position while riding based on the respective topography, or the bike frame without a seat tube and instead a springy top tube, to date have been unable to gain traction, much like 26-inch wheel size.

But triathletes have been and are not just very innovative when it comes to equipment and finding ways to improve performance. In recent years, sport science in endurance sports, particularly in triathlon, has made enormous progress. New and increasingly less expensive measuring devices and methods and significantly bigger research budgets bring more power to sport science. Especially in the past 5–8 years, social media made these findings more accessible to more people, and of those some even created a business model for services in training planning, performance diagnostics, or bike fitting. Some of them have even achieved a kind of guru status, even without having a real education in the area of sports.

The fact is that being an active and successful coach or being able to look back on a successful career does not make one a good trainer or coach. Watching YouTube tutorials and reading various print magazines don't and shouldn't replace such an education. I simply don't understand why still today a coach's professional profile is not protected. Anyone can use that title without having to provide any proof of qualification.

Other occupations that deal with people or their health require professional training or a state exam, but that has yet to happen in sports. Often financial interests take priority, and shockingly, any responsibility for the athletes' health quickly becomes a secondary concern. The result is that scientific findings are in some cases misinterpreted and promoted on the internet.



Figure 2: Frank on Facebook.

In 2020, the German Triathlon Union (DTU) launched an initiative that issues a digital logo to coaches who are licensed by the organization so they can be easily identified as qualified coaches and trainers on their websites and in other marketing materials, enabling them to set themselves apart from coaches without a valid education.



Figure 3: License badge issued by the German Triathlon Union (DTU).

Moreover, some print magazines, blogs, and YouTube channels also pick up the allegedly latest findings without always checking for meaningfulness and proof, and findings are publicized prematurely only to suddenly disappear 1–2 years later.

I can certainly understand that a publisher of a magazine or an administrator of a social media platform has to continuously provide content to capture viewers' attention and increase the number of clicks. But unfortunately, this is increasingly causing confusion among athletes.

Time and again athletes reach out to me because they have trouble navigating that jungle of information and are no longer able to differentiate which information is right, wrong, important, unimportant, or simply unsuitable.

As I already mentioned in the introduction, a coach should not claim that his way is the only way. As we all know, many roads lead to Rome; however, some are rocky and studded with obstacles, while others lead to success without complications.

A coach can choose to work old school, or be considered innovative, jumping on every new trend and using new principles with athletes without thinking or testing them first. I tend to be more restrained.

In the following chapters, I will try to explain what that means and why a conservative approach that is limited to the essentials is not a disadvantage.

3 ATHLETE TYPES

Looking back, I can say what a great privilege and fortune it is to work with so many athletes since 2004. This pool of athletes consists of beginners, overweight people, people with diabetes, youth athletes, and people over sixty, all the way to para-triathletes, Ironman Hawaii participants, amateur world champions, and world-class athletes. Each of these athletes has a highly individual history with unique problems, skills, and abilities.

This large spread alone should demonstrate how different athletes can be. It quickly becomes apparent that universal recommendations or even frameworks that don't take into consideration individual strengths and weaknesses don't necessarily lead to success. The athlete should be seen as an individual. Here we do not only consider physiological and training-relevant markers. The athlete's personality and character play an equally important role.

Over the years, some structures and behavior patterns have repeated themselves in my work as a coach, allowing me to at some point bundle and catalog these characteristics, which have evolved into eight different athlete types. Although these groups include athletes of both genders, I did also put women in a separate group because, as you will see later on, they possess some special attributes. Classification into these different groups should not be viewed as blanket compartmentalization. Rather there are consistently occurring behavior patterns which I would like to share below.

Occupational groups play an important role here as well. Since I am impartial on principle, I hope no reader feels personally offended because they belong to a certain profession or might even feel exposed in some way. Finding yourself in one of these eight groups does not suggest prejudgment or that you have fallen in disfavor with me. I deliberately included these categories in the book to inspire in the reader contemplation of and reflection on their own behavior patterns in the sport.

Here, too, exceptions confirm the rule, particularly because as Karl Heinrich Waggerl once said, "prejudgment is the snooty receptionist in the outer office of rationality." The following are merely my observations that should be referred to in coaching where applicable.

Working together with completely different personalities makes my job as a coach so interesting. Being classified as belonging to one of these groups does not mean that an athlete won't succeed, because when one knows, recognizes, and considers the peculiarities of each group, they can be used to achieve top performances and wins. My categorization is intended to show the strengths and weaknesses of the different groups.

3.1 The Alpha Leader

The Alpha Leader is almost exclusively male and between the ages of 35 and 55, most often works in banking, law, or from home in an executive position. The alpha leader generally knows only one speed and that's full throttle. Rest periods, relaxed training, and unloading weeks are not part of his outlook on life. The number of physicians in this group is also alarming. They are largely nonreflective and tend to have only rudimentary ideas regarding performance physiology and training per se.

The Alpha tends to turn every training session into a kind of competition or to draw comparisons to the male genitalia, because if a training session wasn't painful enough it was, in the eyes of the Alpha, not training but a waste of time.

In group cycling training, the Alpha can always be found in the very front. He can barely tolerate it when an adjacent rider's front wheel is at a level with his own. The Alpha is the classic front wheel extender who always has to position his front wheel a few centimeters in front of his neighbor's.

The Alpha generally completes his training too quickly based on the motto *No pain, no gain.* Due to the overly fast training, the fat metabolism often does not develop optimally, and the maximum lactate production rate (Vlamax) is therefore generally elevated in these athletes, which is in part compensated by a large amount of carbohydrates during training and competition.

This undesirable development of the metabolism results in competitive long-distance results generally being worse than those for mid or Ironman 70.3 distances. These bad results tend to be mistakenly viewed as resulting from training that was too lax in the run-up.

Communication by the Alpha and training documentation in the journal often leave much to be desired. Criticism from the coach is rarely embraced. Listening is not one of the Alpha's strong suits because he does not like to be told what to do. Fulfillment of the training plan, while almost always too intensive, is nearly 100%.

As a coach, in order to achieve a halfway reasonable training speed, I deliberately set lower speed specifications because I know that the Alpha leader will always have the need to overachieve.

3.2 The Counter

The Counter is part of a group that only originated in recent years with the spread of training science topics on social media. The Counter is also almost exclusively male and largely in the age group 18–45. His tendency to evaluate numbers is also reflected in his occupation. Engineers, controllers, and IT specialists make up the bulk of occupations.

The Counter has a very technocratic vision of training. He thinks that training is exclusively subject to certain algorithms and that everything can be planned down to the very last detail based on the numbers. To do so, the Counter has access to nearly all of the measuring devices the market has produced. He collects data and gets entirely lost in the depths of his data sets, but without applying then to the actual practice.

At times, training analysis takes up more time than the training itself. The Counter rarely participated in club sports as a child. He is the classic late bloomer and therefore lacks a certain amount of body awareness. He struggles to assess his training loads without a watch, speedometer, power meter, etc. If a measuring device fails, he quicky loses control and discontinues the training session or competition.

Communication is limited primarily to the exchange and analysis of metrics. For instance, if the side-by-side left/right ground contact time while running is 47.6–52.4, he starts to ruminate. Training specifications are completed meticulously, but in doing so the subjective feeling is ignored, which can definitely lead to *non-functional overreaching*.

3.3 The Social Media Athlete

The Social Media Athlete can be found in both genders and is rarely older than 45. He is not part of a specific occupational group. He is the hipster among the athletes, wears matching outfits from head to toe and in doing so copies the look of many pros. The optics are very important to him and he self-defines by the likes and number of followers on social media. Nearly every training session is documented there and all training is accompanied by a camera.

As up to date as he is in all things fashion and equipment, as unfortunately erratic is his approach to training. Whenever he reads about a new training approach in a magazine, he immediately integrates it into his own training. When he comes across something new a few weeks later, he again immediately seizes on it.

The Social Media Athlete allows himself to be excessively influenced by the things he sees on social media and from other athletes, and quickly jumps on the band wagon of training challenges (Everesting, Zwift-races, streak running, etc.).

There is an above average number of vegans among Social Media Athletes. The Social Media Athlete has trouble developing a good foundation and confidence in his training, which in turn often results in worse competition results. Before a competition, he is often more engaged in posting photos than focusing on himself and his strengths.

When the competition goes badly, he tends to falsely blame external factors such as diet, the weather, etc. With respect to weather, he generally dreads bad weather and rarely possesses training attire for adverse weather conditions.

Unfortunately, his communication is largely limited to social media rather than entrusting himself to his coach.

3.4 The Impatient One

Approximately two-thirds of Impatient Ones are male and can be found across all age groups. He does not fall into a specific occupational group.

The term *endurance sport* includes the word *endurance*. But while the Impatient One possesses this ability in a physical sense, he rather lacks it mentally. He considers his performance development too slow, and rest periods and unloading weeks cause him to practically lose his mind, particularly if he is also a Social Media Athlete and can see those other athletes that train significantly more than he does.

The Impatient One struggles with admitting to weaknesses and tends to extend training volume by 10–15%. Much like the Alpha Leader, his training plan has to be slightly mitigated so the desired training goal can ultimately be achieved. If that does not happen, the Impatient One has a tendency to get injured.

He abhors mobility and athletic training as he does not recognize the necessity and wants to spend his training time swimming, cycling, or running which, combined with the excessive mileage, results in a higher injury risk.

Once the Impatient One is injured, he very quickly loses his motivation and asks himself whether he wants to continue with the sport. His loss of motivation then tends to vanish pretty quickly, and he resumes training too soon, too fast and too intensely, throwing him into another downward spiral.

The Impatient One must be fed much knowledge and background information to pull him out of his impatience. He communicates often and eagerly.

3.5 The Brooder

The Brooder is largely male and tends to be in the age group 25–40. He is also not part of a specific occupational group.

He is quickly and easily knocked off his training plan. As soon as he reads about the training units of other athletes, he doubts himself and his path. He struggles to draw self-confidence from his own training, is at odds with himself, is subsequently dissatisfied with his training units, and can be quite fatalistic.

He suffers from so-called *Stravanoia*, meaning he allows himself to be negatively influenced by other athletes on the platform Strava. For instance, when he hears from other athletes during competition week that they completed six 30-km runs and he did none, he already sees the race as being over before it even happened.

The Brooder unfortunately tends to evaluate his performance too early in the competition instead of waiting for the analysis of the post-race list of results. This results in his giving up early in the race and becoming a DNF (Did Not Finish).

He, too, requires many theoretical arguments so he can develop confidence in his own strength. His communications are regular, if rather negative, both in choice of words and content. Next to the Social Media Athlete, the Brooder has the lowest values in the target-performance comparison between planned training and actual plan fulfillment.

3.6 Women

As I mentioned at the beginning of this chapter, female athletes can also be found in other groups. But I do want to mention a few special characteristics when coaching women. Women are often easier to coach than men. They are somehow significantly more relaxed, don't feel the need to turn every training session into a testosterone-fueled race, and don't tend to constantly put their training concept to the test. They often follow the guidelines scrupulously but do so without losing touch with their body.

Since they are often not as techy as men and don't really care as much about the various metrics and parameters as men do, they usually develop a better ability to correctly read their training load and themselves.

They are more likely to complete too little of the training rather than too much, but not due to laziness but rather because they are better able to read their body. However, some fret about their body weight because they think they don't meet some alleged beauty ideal. This unfortunately often results in too little energy being absorbed from food, in daily life as well as during training.

When a coach can communicate the advantages and importance of food, women become training soldiers who overall are significantly more resilient than men. Sorry, fellow men, it doesn't look good for us!

3.7 The Woodsman

The Woodsman is primarily male and tends to be in older age groups. He can often be found in executive positions, among law enforcement, firefighters, and craftsmen. I refer to him as very stoic. He is very robust and has a high load capacity. He doesn't care which training units are on the training plan; he completes them regardless of weather, time of day and how he feels on that particular day.

He is not really concerned about what he looks like, doesn't care if his cycling jersey matches his cycling pants, and whether his legs are shaved. His bicycle is often an older model, which does not prevent him from bringing very strong performances on it. His equipment is often in poor condition, his bike chain completely dirty, which does not particularly bother him.

The Woodsman is predestined for long distances and has very good endurance numbers. One could call him—and this is not meant disrespectfully—a diesel engine. He prefers to avoid higher intensity sessions and would rather train longer at a more relaxed pace. His maximum lactate production rate tends to be quite low. He doesn't need a particular diet, but just eats what's put in front of him.

The Woodsmen group has a greater than average number of athletes that have been doing triathlons since the 1990s. The Woodsman tends to minimal communication, but he is reliable, because whatever is on the plan gets done even if it isn't recorded daily and precisely in the training journal.

3.8 The Champion

Of course, there are champions of both genders and in all age groups. They share good body sense and a certain intuition about when to push their training and when to take a day off. They tend to trust their feelings more so than the parameters shown on their watches.

Interestingly their feelings almost always match the measured values. Overall, I would characterize Champions as makers more so than grumblers or brooders. They are not easily dissuaded from their principles by information from the internet or magazines but tend to just digest the information and carefully evaluate whether such a change would make sense. They are patient, understanding that it takes a certain amount of time to develop certain abilities in training. Their patience is underpinned by goal-oriented action and thinking. They are never hasty, do not insert imprudent panic-based training units, but rather trust their own training concept.

Champions are aware of the significance and importance of regeneration and balance. Except for the Woodsman, they are better able than any other group to shift their thinking away from the triathlon. Their communication is very precise, and they can relay their current status in a very nuanced way. They are very forthcoming, stick to their word, and are very punctual and disciplined in their daily activities.

The Champion builds a people network that accompanies him on his path. Here coaches, physical therapists, life partners, etc. form a team.