Reflections on Registering Performance

By Ken Hutchins

Using a Stopwatch

As those who have read *The Renaissance of Exercise—Volume I* (ROE-I) already know, I entirely dispensed with registering performance with a stopwatch several years ago (2011). This change can be traced primarily to the influence of Al Coleman. He argued that timing a set was allowing or encouraging several things to go wrong.

Since I had complete control in my facility, I was not so much aware of what Al was trying to convey. However, I believed that I already appreciated his criticisms of stopwatch practice. I also considered the issues pretty much on balance with issues that arise with tally-counter practice. With the urging of Josh Trentine, I made the change with all my clients within one week, and I began to appreciate some of what Al argued, but I was not completely convinced.

I had gone back and forth between the stopwatch and the tally counter several times before. This underscores that I was adept at both, was familiar with the technical advantages of both—or so I believed—and that it was not a troubling change for me or my subjects.

Stopwatch practice was started by me at the Nautilus-funded Osteoporosis Research Project and seemed a good idea then. I reasoned that since the old-time practice of counting repetitions in each exercise was merely a reflection or representation of time, why not delete the conversion of time to repetition count and just observe raw time? Therefore, we applied the stopwatch.

Granted, the stopwatch is not new to exercise, more correctly—to *exercise notions.* And a stopwatch, like any tool, can be abused in various ways. For instance, nonsensical exercise programs commonly incorporate the stopwatch to test how many repetitions of a movement can be performed within a given interval. Of course, this intentionally results in an as-fast-as-possible performance. Most of us have observed this applied to sit-ups, pushups, various agility drills, and hot-dog-eating contests.

Once I left the Osteoporosis Project and went into the commercial arena at Lincoln Fitness Center in Maitland, Florida in 1988, I ceased the stopwatch and began to record repetitions again. Some of the instructors there were physically challenged to use a stopwatch, and they had been using the tally counter already. Although I considered stopwatch practice to be superior, I let this be.

I wrote the first edition of *SuperSlow®—The Ultimate Exercise Protocol* (the "technical manual") in 1989 while I was at Lincoln Fitness Center (1988-1994). In that first edition, I suggested that all instructors use either the stopwatch or the tally (trip) counter or both. I also suggested that most instructors should use a tally counter instead of the stopwatch.

After explaining use of the tally counter, I wrote this about the stopwatch:

> Though it provides the instructor with more information, a stopwatch requires more attention. The primary purpose of the stopwatch is to count repetitions, or more accurately, measure set duration [comprised of acceptable repetitions]. Set duration can be converted to a repetition count. However, a stopwatch is also convenient for cadence counting, especially if you are unsure of a 60-beat-per-minute cadence.

I also briefly discussed the possibility of simultaneously using both a stopwatch and a tally counter. I recommended that this be avoided except for an occasional need to ascertain the 10-second cadence.

I did not change much of what I wrote about stopwatch use versus tally-counter use in the second edition (first printing in 1992) from that of the first edition of the technical manual. And I did not immediately change to using the stopwatch again in 1994 although by then I had obtained a better venue (better clinical control) for application of the stopwatch in the supervision of my subjects.

But while I was at this second commercial venue I was strongly influenced back to exclusive stopwatch use by conversations with Doug McGuff, MD regarding his ideas about Time Under Load (TUL). He later explained these ideas in his book, *Ultimate Exercise* (April 1998). Note that by the release time of his book, I was already into my own facility where I had total control. As a result, I continued using the stopwatch for my subjects and required this of those instructors who worked for me or with me until Al made his recent suggestions against it.

I moved to Texas in 2014 and then encountered instructors in a facility there who were seemingly frozen in an earlier epoch. Despite owning copies of ROE-I—one copy of which is perpetually available for reference in the reception room of the facility—all the instructors were still registering performance with the stopwatch. This did not dismay me at first because I had not truly grasped how they were using the stopwatch and because I had not really grasped Al's intuition on their potential misuse by many low-information instructors. There is also some possibility that I now appreciate these problems beyond Al's intuition, but this is difficult to appraise.

To my disappointment, the stopwatch was being used to thwart the RenEx/SuperSlow exercise principles in several ways that I had never considered before. I admit that I was, at first, in shock for several weeks, partly because I was trying to identify what was incorrect and how it had become incorrect. Yes, I immediately saw the mess it was creating—as I will detail—but I was not so quick at seeing all the layers to the problems. Some of these problems are exceedingly subtle with regard to how they are traced back to misuse of the stopwatch.

Before I delve into these specific abandonments, note the general practice of each exercise:

> Each subject is placed into a machine, a stopwatch is mounted on the machine in front of the subject, and the stopwatch is zeroed and set to run for some arbitrary length of time—usually either two or three minutes—as the subject performs the movement.

On the surface, none of this seems so bad.

Apparently, this practice sprang from someone's great/not-so-great/really-bad idea to dispense with the need to wear the stopwatch about the instructor's neck and, instead, place the stopwatch so that that subject can see—in addition to the instructor seeing—the timekeeping.

And note that this genius sprang from the minds of instructors who had all been through and had passed the SuperSlow Certification Program. To pass this, they had been required to read and closely study my technical manuals and then required to pass written, oral, and practical examinations. To accomplish this required each of them to become absorbed into the protocol and its technique and philosophy.

Misuse Effects

Following are those subtle layers that emerged to me as I studied the result of abusing the stopwatch in this facility:

First. We do not want the subject to act as timekeeper. He is already overwhelmed with more important matters—free breathing, feel of speed (which he must acquire by not continuously looking at a stopwatch), relaxing his noninvolved body parts, maintaining neck neutrality, focusing on the target musculature, etc. Timekeeping is solely the instructor's responsibility. Any acceptable or unacceptable repetitions are to be, respectively, included or not included in the final recorded elapsed time, and the subject is not to be the judge of the repetition acceptability.

Second. The stopwatch defeats neck neutrality on almost all exercises. This is either because there is no good place to put the stopwatch that coincides with neck neutrality and/or because trunk movement during the exercise necessitates the stopwatch be in constant movement with the pointed direction of the subject's nose. (What's the next *bright* idea?... a head mount for the stopwatch?) Also, proper neck attitude varies between individuals.

Third. Both the subject and the instructor experience reduced onus. All the subject must now do is run out the clock. It's as if the instructor set the timer on an oven to bake a cake. And when the timer rings, the cake (the subject) is removed from the oven (the exercise machine) and ushered to another oven (machine) with little or no regard for whether the cake is actually done (the target musculature is properly inroaded).

Fourth (Another Dimension of Third). Analogizing again: While the cake is baking and until the timer goes off, the cook has little to do, so perhaps, he can set about to start the baking of another cake in a different oven. The timers *keep watch* on the times, but of course, not on the cakes. The cook remains alert to the timers, and with little else to do until he must carefully insert a cake or carefully remove a cake from the oven.

Since the instructor has reduced onus while the stopwatch is running, he has his hands and mind free to chat with the subject, chat with others in the room, set machines for other clients, go to the bathroom, check on phone messages, greet people at the front door, go out the back door to retrieve an item from his car, and even to run through (not instruct) several subjects simultaneously. I have witnessed all of this here. The entire enterprise of quality exercise instruction encompassing critical detail is forfeited.

This is somewhat comparable to the Curves® program: The equipment is arranged in a circle. A supposed "cardio" device is placed between each of several supposed "strength" devices. The subject stays on the first device for an arbitrary length of time, then moves to the next device—thus alternating "strength" device, "cardio" device, "strength" device, "cardio" device, etc—for another arbitrary period of time strictly regimented with timers and on and on until the circuit is complete.

There are many other shortcomings with the Curves program that I have reported before. The so-called strength devices are isokinetic and do not provide negative work. Therefore, a target musculature experiences discontinuous loading rather than the continuous loading required for meaningful inroad and growth stimulation.

And any subject who really pushes the intensity will experience dangerous jolts of force at the upper and lower turnarounds as he suddenly unloads one musculature to violently load another musculature each time the movement direction reverses.

And of course, the cardio devices are a waste of time for anyone.

As I have mentioned before, the Curves program is effectively a series of steady-state activities interspersed with other steady-state activities rotated at intervals maintained by a stopwatch. An important key to this incorrect approach is the stopwatch. It permits the hiring of low-knowledge employees who merely serve as ushers between the equipment and as paid companions to talk to. In this respect, this is where we are now in our home town, interminably licensed SuperSlow® facility.

Fifth. This is extremely subtle and extremely important: With stopwatch abuse, the subject is taught and reinforced to the incorrect objective. Stopwatch abuse defeats the real objective to elicit the growth stimulus. Instead, it encourages the subject to focus on time expenditure with the load—a version of the assumed (erroneous) objective. The subject is taught that running out the clock is the objective—a different and corrupted mentality from inroad practice.

As I develop a novice subject, I take extreme care to not only supervise his workouts and protect him from injury but to also make him understand the inroad principles and appreciate the

differences between the assumed objective and the real objective. This is a long, tedious, and repetitious journey for me and the subject. And it is extremely rewarding when an occasional subject comprehends the real process at work here. And it is now obvious to me that this priceless awakening is hopelessly dashed in the tutelage of almost any instructor who uses a stopwatch. (I never expected to see the day when I would write or state such a proclamation!)

During my processing to arrive at what I admit in the previous paragraph, I overheard an instructor tell a subject that, "… the resistance in an exercise is correct if the movement becomes difficult by the end of the selected time."

This was a major enlightenment to me. It revealed the grossly incorrect thinking by this SuperSlow certified instructor and her coworkers.

To invert the instructor's words: "The subject never attains failure unless the resistance selected is too much." Wow! Now we can see how the seed of misinformation is planted, and I promise you that it will grow into and/or reinforce a myriad of future misunderstandings. Both momentary muscular failure and thorough inroad technique are not merely defeated, they are extinguished as an intellectual possibility for the subject. Bad thinking leads to bad language. And bad language causes more bad thinking.

Misunderstanding is the most common reason that subjects quit a SuperSlow or RenEx program. This is bad for everyone. This confidently assumes that the subject will go do something else for exercise purposes or merely lose interest altogether. The instructor will lose a source of income as will his facility. And the other subjects who reap tremendous benefit from the art will risk losing their instructor as well as their place to practice the art.

Granted: There are subjects who cannot be physically challenged to the degree that they experience a true muscular failure. I have instructed many subjects who are challenged just to get to and inside my facility. On their level, this is an accomplishment for them and speaks to their decrepitude as well as to their intellectual supremacy to will a workout.

But an exercise instructor's job is to push the envelope, however superficial that is. Bear in mind that inroading begins well before muscular failure and may actually cross a stimulus threshold at a shallow depth for those weakest subjects. We have no way to know where this threshold lies along the inroad path, and I suppose that it moves deeper as the subject improves.

The instructor's job is to best ensure crossing the stimulus threshold with an inroad that is as deep as possible. Whether or not obtaining momentary muscular failure is possible for the subject, trying to teach and motivate the subject towards this failure remains the key to the program. *The success of a strengthening program is predicated on attempting to fail in each exercise.* I now appreciate that stopwatch practice handicaps the student of exercise. Stopwatch practice is bad pedagogy. And I find it amazingly ironic that almost all of the instructors here are or were professional educators!

Sixth. Does stopwatch abuse promote unwanted changes to the workout chart and its nomenclature? I believe that it does; however, I must study this layer of the problem more to assert this with certainty as well as to clarify its nuances. I will be surprised if it does not.

Also, I believe that there is a connection in some way to instructor laziness that promotes loose use of the stopwatch, and that this will extend to many of the various layers including proper progress charting. There seems to be a strong thread of laziness throughout these issues that is reinforced with my observation of the instructors' general habits. Obviously, any strict adherence to any protocol regarding any human endeavor requires discipline, the opposite of laziness.

Can this connection between laziness and stopwatch abuse be the blame for misuse of the gym door, whereas it should be a kind of *red line* likened to that in the surgery suite? I plan to write a new chapter for this in Volume II that clearly explains how this important barrier is to be used for a SuperSlow or RenEx facility.

And if stopwatch abuse lends to indolence, does this same trend explain the disorganization of the weight plates and the accessory padding in the workout room? Does it also partly explain why the instructors wear baseball caps, tennis shoes, and short sleeve shirts with the tail out of their blue jean and khaki pants while smacking gum? This is difficult to definitively connect, but I believe that these and many other problems can be linked to the same slovenliness and disrespect for the requirements of the protocol.

Seventh. Another amazing consequence of stopwatch abuse is the eventual elimination of cadence counting. The instructors here no longer cadence count for their subjects. What's more, they claim not to know how to perform this basic skill of SuperSlow instruction. And the owner—my beloved, late brother—claims that they don't know how, because no one taught them to do it. Is this a global, "My doggie ate my homework”?

Among the eight SuperSlow certified instructors here, I personally certified seven. The remaining instructor certified with one of my surrogates who presented her with the same testing materials and exam as the one I used. I wrote all the test questions on the exam, and these questions did not change between 1993 and 2009. All eight were tested before 2009.

The first item tested on the practical section of the exam was a pass/fail demonstration of the instructor's ability to cadence count. And this was preceded by the oral section of the exam where the instructor was made to demonstrate the cadence counting during the last and seventh part of the Preliminary Considerations under the heading of *Speed Considerations*. Herein, this part broke down into two subparts, one of which was to explain the acceptable excursion speed range and to demonstrate the correct speed by bending one elbow as the cadence is verbalized.

Then I heard the lame excuse that some or all of these testing instructors shadowed my surrogate who used a stopwatch and never cadence counted. On the contrary, one of these testing instructors regularly worked out at the same surrogate's facility and reports that she routinely heard cadence counting being performed by the surrogate and other instructors around her.

Another Comparison

On most low-end digital cameras, the picture is recorded in a single compressed file format. What the camera puts it in is what you get.

As one goes up-scale, several file formats are usually offered. And then at the highest-end professional cameras, the several file formats are joined with an option for "raw data."

The typical photographer has no use for a raw data file. It is an annoying, memory-hogging file that must be compressed, and can't be readily sent to social media or efficiently through text or email. It is usually just too large. The other formats—tiff, several sizes of jpeg, and other proprietary formats—offer varying degrees of compression that make sharing and storage far more practical and wieldy.

However, the professional graphics people like a raw data file. They can manipulate it to any artistic extreme they wish using complex, expensive programs like Adobe® Photoshop®. Even I, though I consider myself a highly skilled photographer, do not possess the graphics skills to make use of raw data files in my photographic touch-ups. I avoid raw data files. I stick to the jpeg and tiff files for almost all my work. For anything beyond this, I hire a graphics professional.

I now believe that a similar comparison is appropriate for the stopwatch and the tally counter. As I quoted earlier in this chapter from the first edition of my technical manual, "Though it provides the instructor with more information, a stopwatch requires more attention." The stopwatch is somewhat like a raw data file produced by the higher-end digital cameras. And, with the exception of a few very advance instructors, the stopwatch encourages a breakdown in the proper philosophy and protocol of exercise.

Conclusion

I have never taught what I observe among these errant, hometown, SuperSlow instructors. And I never could have imagined that my writing and testing on the subject of *Registering Performance* could have been so mistakenly interpreted. I am appalled and embarrassed that this misinformation is now being disseminated in my name and under my banner like a contagious disease by people I supposedly trained otherwise. Apparently, I have wasted a lifetime writing and conducting certifications. It is sobering that these instructors submitted to the testing and its costs because they were the few that were intensely interested in the subject. Now my textbook is no more than a display item that no reads and studies.

Perhaps there is some reward in the exposure of the described unintended consequences of stopwatch abuse. Perhaps this shows us where we must find better ways to infuse the proper practice and approach through our writings and coursework. At the very least, it demonstrates that Al Coleman is correct on this subject, and that the stopwatch must be avoided for registration purposes in dynamic exercise.

As some of my readership know, I believe that a basic understanding of exercise is an unlikely affair. Humans seem hardwired with loose notions about exercise, and a mortal like me is extremely challenged to effect any change in the circuitry. And as soon as I become smug with some success in the sought corrections, the circuitry merely snaps back to its original state.

Along this same line, my loyal friend, Josh Trentine, is extremely frustrated with our collective (me, Gus Diamantopoulos, Al Coleman, Josh Trentine, Jeffrey Muehl) efforts both to build correctly designed exercise equipment and then to sell these products to customers who will use them as we insist. We are now jointly working on tools that will eliminate the issues that arise from stopwatch and cadence counting abuse. I hope this will succeed, for by now I have about exhausted all the possible nouns, pronouns, verbs, adverbs, adjectives, articles, gerunds, infinitives, prepositions, and graphic aids to explain it.