FACTORS AFFECTING PERFORMANCE

By Greig Cronauer Sponsored by FINIS (This article appeared in ASCA Newsletter Volume 2003, issue 9)

Has this ever happened to you as a coach during a meet?

A swimmer comes up to you in frustration after a poor swim and says, "I just don't understand it! I tried my hardest and it wasn't even close to my best time! Suzy and Jimmy got their best times and I work 10 times harder than them in practice. Plus, they don't come as often as I do. It just isn't fair!"

This is an age-old problem and one that is tough to answer to the swimmer's satisfaction. Here is how our team handles it.

Every couple of years, early in the season, we have a big team meeting with the swimmers. I hand out this "Factors Affecting Performance" sheet that lists about 30 things that can affect how well a swimmer performs. We discuss it as a group and encourage feedback throughout.



Each time you work on one of the factors below is like taking one big step closer to the target. It makes it easier to hit (a best time) and maybe get a bull's-eye (your dream swim). Working on all of them means stepping 30 yards closer and shooting your arrows from just a few feet away.

This discussion teaches the frustrated, hardworking swimmer to not get discouraged if the lazy swimmer gets a best time here and there. You can hit the target at 40 yards just the same as you can miss it at 10 yards, but I will take the "10 yard" odds any day of the week! Maybe theirs was a lucky swim ... or maybe they work quietly to improve factors such as stroke technique or good diet. Maybe they get 10 hours of sleep a night where the frustrated swimmer only gets six. Either way, don't focus on them or their factors, focus on yours.

It does no good for a swimmer to complain they are 5 feet tall while their buddy, who is the same age, is 6 feet or is born with bigger hands, bigger feet, or a better feel for the water. They may have been "born closer to the target" but we all have seen race winners who weren't the tallest or strongest ones on the blocks. This exercise reminds your swimmers to work on improving all the other areas they have control over.

We engage the swimmers during the meeting by asking them questions or raising their hands in response. During the rest of the season, we occasionally hang the bow and arrow next to the workout board so they are reminded of what they learned. We also ask the swimmers to take the list home and circle the ones they think they can improve on, then post it somewhere as a daily reminder.

Getting the parents involved in this process is especially important for age groupers. Posting the sheet where both parents and swimmers can add understanding and focus to their goal setting. The end result will be faster swimmers and can eliminate the frustration exhibited by the swimmer at the beginning of this article.

FACTORS THAT AFFECT YOUR SWIMMING PERFORMANCE

Total overall performance is a combination of many different things. Knowing and understanding each of the factors is the first step toward success. Each one is a step closer to a "bull's-eye." No one is going to hand you fast swims on a silver platter ... you have to work on each of the following areas in order to be successful. No single factor is the key, but a combination of them can assure continued and steady improvement. These are listed in no particular order.

STROKE TECHNIQUE

Backstroke — Breaststroke — Butterfly — Freestyle — I.M.

Why are your best strokes your best? Do you try to improve at least one or two technique areas each day? What about the other stroke and technique areas?

- Starts... quick reaction, smooth entry, etc.
- Turns... quick, smooth, no "dead" spots, etc.
- Push-offs... Streamline, kick, no breath on first stroke, etc.

Stroke technique is the biggest and richest improvement area for most swimmers.

GOAL SETTING ABILITY

Try to set goals that are challenging yet reachable. Coach can help you. You need short term as well as long term goals. Swimmers with specific goals carry with them a sort of subconscious motivation that helps boost them through minor obstacles or challenges. This can make it easier to perform proper push-offs every practice or bear down on the last couple 200's of a tough set where other swimmers are just praying for it to end.

DESIRE

Why do you achieve some goals and not others? What factors are responsible? What factors contributed to your great 100 Freestyle time at the ABC Meet? Why was your 100 Butterfly time at the same meet so poor? Why was your Breaststroke so great all season but your Freestyle so "flat?" Analyze all these factors. Maybe you "wanted it" more? WHY!? Which factors were better in practice when you were "wanting it" more? (Goals again!) When leaving the pool after a great practice, ask, "Why did I work so hard? Why did I work so smart?"

DIET/NUTRITION

Your body is like a race car. It needs fuel, water, oil, good tires, etc., to run fast on the track. But the best fuel, best tires and best oil don't mean a thing if the engine seizes due to overheating (lack of water). Are you keeping your body...

- Fueled up with high octane... Carbohydrates?
- Tuned up... Proteins and Fats?
- Well oiled... water, vitamins, and minerals?

Is your daily intake 70% carbos, 20% protein, and 10% fat? When you completed your 3-day food log last month did you have the right mix of the foods in the pyramid? An unbalanced diet can be like taking the fastest and most powerful engine and putting water in its gas tank.

ATTENDANCE

Do you swim more days during the week than you rest?

3 out of 7 (42%) — or 4 out of 7 (57%) — or 6 out of 7 (85%)?

Before puberty, 3 - 4 days/week is enough to improve nicely. After puberty, 4-6 days/week is necessary for top performance. Remember that illness, meets, holidays, and special circumstances all reduce that average. Because of this, most swimmers on a 4-day/week (57%) plan usually end up coming less than 50% when totaled at the end of the season. Training adaptations do not occur as quickly when the body averages a practice every other day! Half of those days the body is building strength and the other half it is losing that strength. (This is a very crude analogy, but true, for athletes aged 12-older.)

WEIGHT

Each pound you gain in muscle can help <u>pull</u> you through the water. Each pound you gain in fat is just added weight you must <u>drag</u> through the water. Fortunately, this isn't as big a factor in the pool, where there is buoyancy, as it is on land. But there is a limit. If you lose weight, lose it by working harder and eating better, NOT by dieting.

HEIGHT

Some swimmers have no control over this factor due to hereditary. It is a fact that — all other factors being equal — bigger swimmers have an advantage over smaller swimmers. But there have been many smaller swimmers make the Olympic Games or win National championships. You just have to make the other factors that much better.

STRENGTH / POWER

Built through a well-designed dryland exercise program and by power work in the water (such as surgical tubing, doing sprints at 100%, etc.)

PARENTAL SUPPORT

Do they encourage you to do your best? Do they show that they care about you and not just about your "swims?" Do they go to the meets to watch or help? Do you feel like they press you too much? Not enough?

NATURAL ATTRIBUTES (PHYSICAL)

Muscle fiber (fast twitch, slow twitch)? Big feet or hands? Double jointed? Flexible? Thin boned and skinny? Heavyboned and muscular? Hereditary factors?

EFFORT IN PRACTICE

Are you physically depleting your energy reserves in practice to maximize training benefits? Are the practices hard enough? If so, are you working them to your potential? Are you working to make every send-off? Are you making the goal times the coach gives you in practice? This factor also includes building mental strength and strategy such as negative splitting, pacing, knowing where to make your move, etc. (In some cases, the swimmer may even be working too hard if they aren't getting enough sleep, have a poor diet, or don't allow for proper physical recovery.)

ENDURANCE

The solid foundation for all swimmers during the "meat" of the season. Swimmers need a good distance base to help all their events. Almost any swimming builds endurance but the most effective are the long distance/short rest swims at a decent pace set by the coach. Do you bag these practices? Do you swim slower than you should? Do you stop to "adjust your goggles" often? If so, you are not forming a good foundation from which you can build for speed in your 50's or 100's.

PACING / SPLITS

You can be very strong, very fast, have great stroke technique, and be perfectly tapered, yet still fall on your face if you don't race with good splits. Can you tell how fast you are going? Do you remember your coach's split instructions during a race? Do you remember your splits from your last meet to learn from them? Did you go out in the speed the coach wanted? Do you work on your finish in practice so you know how it will feel in the big race?

TAPER

Taper is a sensitive time. Are you confident? Do you follow the coach's specific instructions during a practice or do you goof off because the work is easier? Do you get enough sleep and rest while your body adjusts to the changes the taper brings? Are other sports tiring you out during taper? Are you eating the right foods in the right amounts?

ILLNESS

Sickness reduces the number of those precious practices. How many days did a cold or flu knock you out of practice? How much strength did you lose? How long will it take you to recover? Do you invite illness (reducing your resistance) by going outside without a hat or warm clothing? Do you pick up germs from friends, relatives, or girl/boyfriends? Do you wash your hands enough during the cold and flu season? What about illnesses like mononucleosis? Do you have prolonged periods of fatigue? Have you had a physical lately?

PERSONALITY

Hyper versus laid back? Cocky versus timid? Self-confident or insecure? Do I take chances or play it safe? If I have a question or concern do I actively seek answers? There are no good or bad personalities; in fact all good teams have a

mixture but ask yourself, "How does my basic personality affect my ability to improve all the factors listed in this handout?"

REST

Both physical and mental. The most important is a good night's sleep every night during the season, not just before big meets. You should recover enough from each workout to gain the most benefit. Many swimmers get less than eight hours of sleep, especially in high school where they may study till midnight. Try being at your best for a 7000-yard practice after two late nights like that. Even if you finish every yard your body doesn't recover enough to get full benefit. What about the rest before a meet? How much you get the second and third night before the meet is more important than the night right before. And if you get more than your normal average the night before it may make you feel sluggish and make it difficult to "get going" during the meet.

FLEXIBILITY / STRETCHING

Am I flexible enough to perform the proper stroke technique? Do I know some good flexibility exercises? Do I come early to practice to do them before I swim? Easy stretching will help maximize your effort in practice because you won't have to stop or swim slower because of cramps or stiffness. Swimmers need flexibility in feet and legs for fast kicking just as much as in arms and shoulders for proper technique.

CONFIDENCE IN YOUR TEAM

Are you confident that your team program can give you an edge with each of these factors?

SUCCESS

Have I achieved success or recognition in some form to make me hungry for more? Success breeds more success! It fuels the fire and fans the flame!

TRAINING ENVIRONMENT

Positive, goal-oriented, swimmers encouraging each other, hardworking, etc. Good facilities, visible record board, proper equipment, etc.

AGE

Older swimmers are generally faster because of size and experience, but this is a variable factor for each individual. When are/were your growth spurts? Are you maturing slowly or quickly? Have you reached puberty? Are you ahead or behind your classmates? Remember, time is the great equalizer! (Don't worry if you are an 11-12 boy and are being beaten by someone with a lot more hair on his legs than you have.)

COMPETITION

Do you go to meets where the competition is always too stiff? Too easy? Good mixture of both? Balanced competition allows you to achieve the success that boosts you as well as the competition that pulls out your best performance.

FACTORS AT MEETS

Do you warm-up and warm-down before/after events? Or does coach have to yell at you to "loosen down?" Do you stay warm between events? (wear warm-ups) Staying relaxed and not expending nervous or physical (running around) energy. Mental imagery — black hat versus white hat. Visualizing your race ... focus on specifics ... what you want to do, not what you want to avoid ... no distractions. Team support ... both giving and receiving. Getting rest and staying calm between a.m. trials and p.m. finals.

PRACTICING BETWEEN SEASONS

Some need to swim during those 2-3 weeks, some don't. Do you? Some need to recharge their mental batteries, some want to get a jump on the next season.

ABILITY TO CORRECT A STROKE FAULT

Takes lots of willpower to mentally force yourself to change a habit. Mental work for swimmers is often more difficult than hard physical work. If you can do it correctly under ideal conditions then the coach has done his job to teach you. Now it is up to you to take that skill and remember to use it constantly to form a new and good habit.

DISTRACTIONS

Boy or girl friends — family or personal problems — these can all make you lose focus and desire. Talk to the coach if you have a problem. Share with your teammates and they may offer more support than you think. If these are not options then try to leave your problems in your locker when you come to swim. This is tough but it can be done.

TEAM SUPPORT

At meets—but especially at practices. If you are feeling good ... SHARE IT! If you have extra ... GIVE SOME AWAY! Encourage! Support! Whatever you give out will come back to you double or triple.

MENTAL ATTITUDE

What would your response to the following comments be? And Why?

Teammate says... "Hey, did you hear that Suzie Smith (a rival) swam a 1:05 (one second better than your best) at the district meet?"

Coach says... "You are swimming the 400 IM next meet."

Coach says... "The next set is 10x500 Freestyle."

Did you immediately look at it as a negative or as an opportunity? You don't have to like everything, but you can learn to mentally "roll up your sleeves" at challenges or setbacks.

COACHING

A good coach teaches and helps you understand all these factors and encourages you to be the best you can be by strengthening your good ones and helping you improve the weak ones.

FUN

The X-factor — the glue that helps bind all the factors together. Fun can come in many forms besides "sharks and minnows." Tell your coach what types of practices you like. Which ones are fun? Which ones are motivating? Is there enough variety? Coaches need this type of input from their swimmers (although they may not always agree with it.)

HOW MANY STEPS WILL YOU TAKE TO GET CLOSER TO THE TARGET?

