

SKILL IMPROVEMENT PROGRAMS USER GUIDE

INTRODUCTION

Congratulations for taking the plunge with e-swimcoach! Whether you swim for general fitness or to compete these programs are a great way of improving your swimming skills.



We wish you all the best in your skill development adventure.

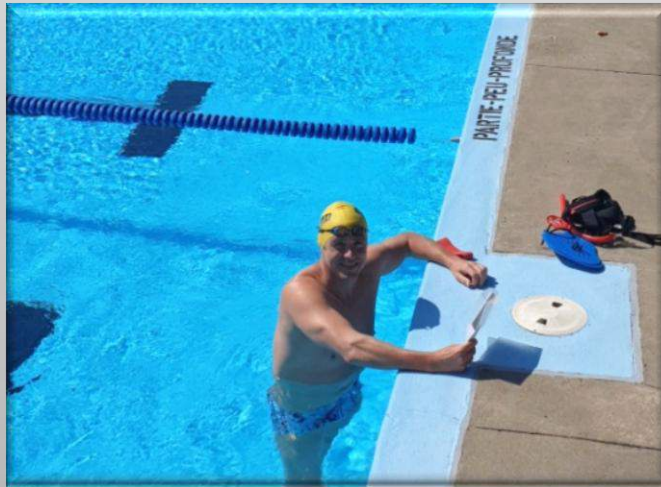
To succeed you will need to be driven, patient and focused...

Even if you are an experienced swimmer, you may have technical issues that have been masked for years by your strong points. For this reason we encourage you to start the program from the beginning (Level 1).

Re-visiting the basics can help lift barriers that may have been limiting your progression...

HOW TO USE THE SESSIONS

The sessions last between 50 & 60mins each. This is because it is difficult to remain focused for longer periods of time.



Work is quantified in duration rather than yardage. In this way programs can be adapted to different sized pools : 25 or 50 (meters or yards).

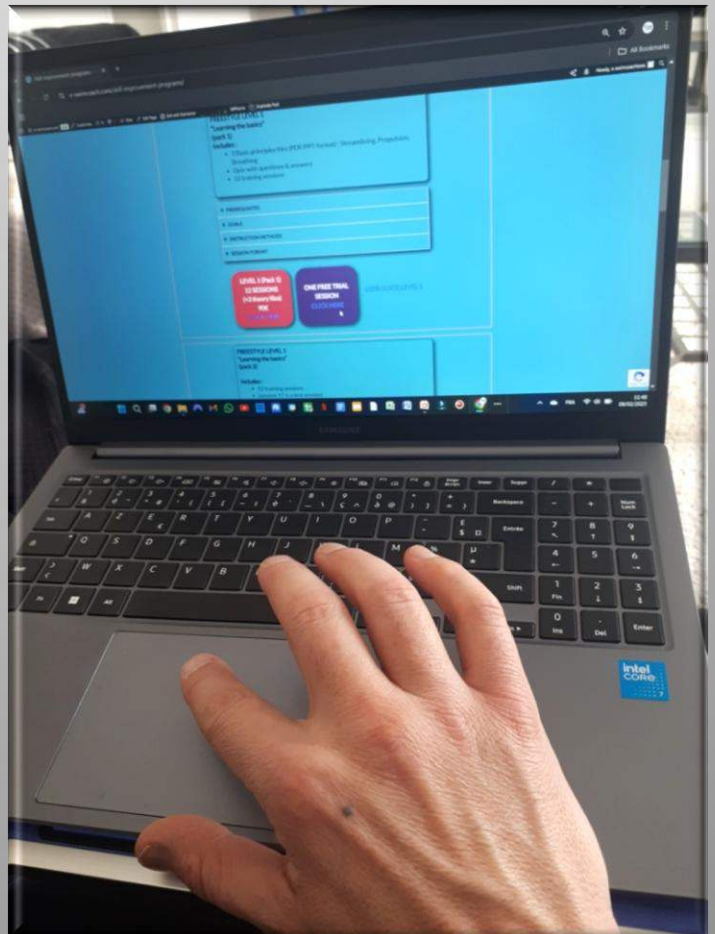
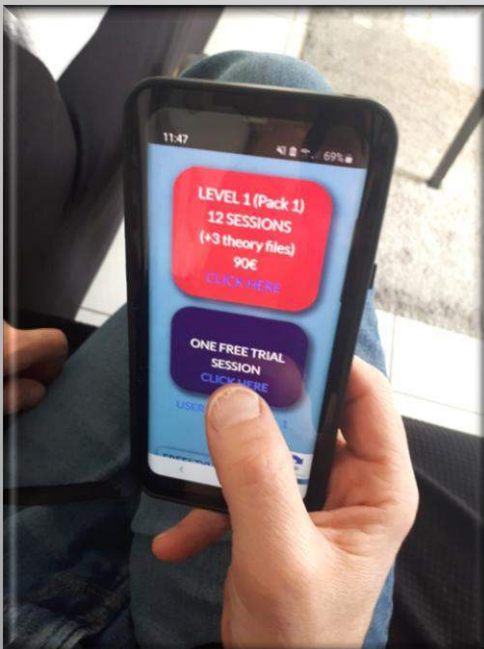
This also ensures that you have a balanced workout whatever your level of expertise.

EG.

In 15 minutes some swimmers will be able to swim 10 x 100m at a steady pace with 15sec rest. Other swimmers will only be able to swim 7 x 100m. The number of repeats isn't important! What counts is doing the exercise correctly, at the right intensity for the prescribed duration.

STEP 1

1) Download the PDF files on your phone or your computer



STEP 2

Make sure you have the proper equipment before starting the program.

(The “Tempo trainer” is only necessary from LEVEL 2 onwards).

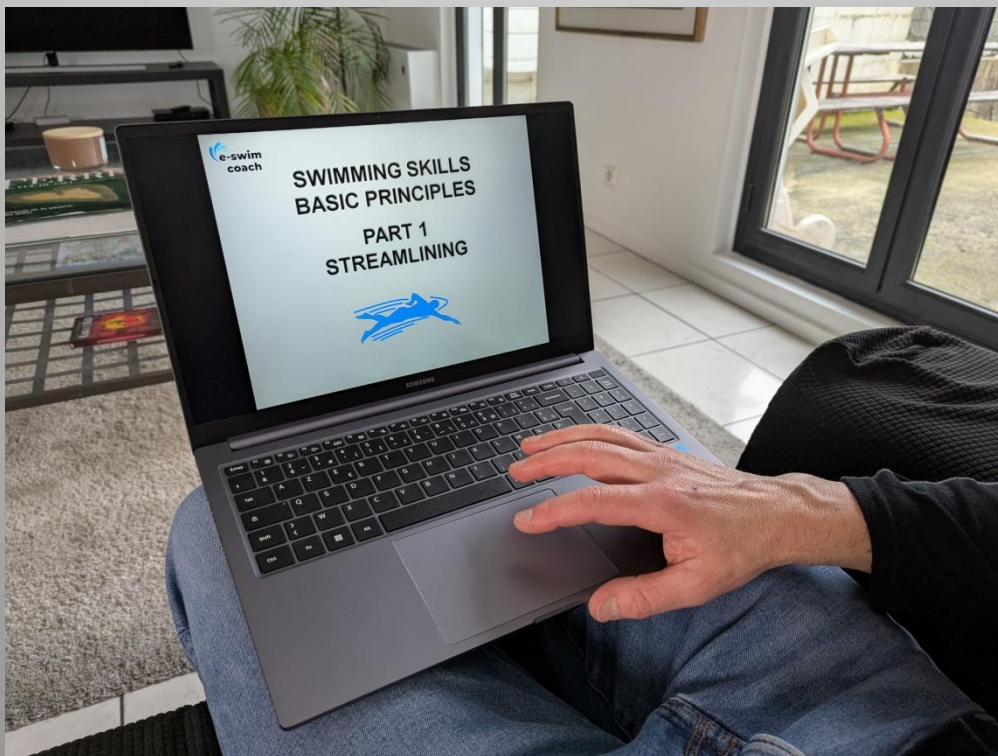
Snorkel (frontal)		Kick board	
Fins		Pull buoy	
Paddles (Simple design with wrist bands)		Ankle/Wrist weights* (2X) 300-500g	
Ankle band		Swim parachute*	
Swiss Ball (For dryland drills to increase body awareness)		Fitness band (Thin/light)	
Stopwatch or smartwatch (Waterproof)		Tempo trainer (Necessary for Level 2 programs & onwards)	

*Please note you can transform your parachute belt into a weighted belt by simply strapping on the ankle weights ! (no need to buy more weights!)

STEP 3

For the Level 1 sessions you will need to study the basic principles before you go swimming.

Level 1 sessions focus on one basic principle at a time (streamlining, propulsion or breathing), so you can alternate theory and practice for the first 3 sessions.



The basic principles quiz is a good way of seeing if you have understood the theory.

STEP 4

If you intend to use your mobile phone on the pool deck to follow the session, make sure your phone is water resistant or use a waterproof casing...



Bear in mind that in some pools the mobile network signal is not very good which could be a problem for watching the videos!

Alternatively you can study the videos before getting into the water and print the PDF on paper for the pool session...



HOW TO READ THE SESSION






Freestyle skill improvement program

Level : 1 "Learning the basics" (pack 1)
 Session : 1
 General focus : Propulsion
 Duration : ~50min

 Please study the PDF file : "Basic principles"

Here you will find the session number and the general focus of the day.

The program is progressive and it is recommended that you follow the sessions in the right order.

				
Swissball catch (swiss ball) >Work : 10 reps/arm >Repeat : 3X >3rd round close your eyes	Swissball catch	•Maximizing the surface area available for propulsion •Preparing to apply force in the right direction	Roll the ball forward and "wrap" your arm around it Notice how hand & forearm are nearly vertical Notice the high elbow position	5
Alternating : -1 length Doggy paddle -1 length Full stroke Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady	Doggy paddle Full stroke	•Maximizing the surface area available for propulsion •Applying force in the right direction	"Imagine wrapping your arm around a barrel" When you "doggy paddle" keep an eye on your elbows to see if they are near the water surface	10
Alternating : -1 length Underwater recovery -1 length Full stroke (snorkel + fins) Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady	Underwater recovery Full stroke	•Maximizing the surface area available for propulsion •Applying force in the right direction	"Imagine wrapping your arm around a barrel" Start applying pressure when your fingers are pointing down (not before!)	10
Forearm paddles (snorkel + paddles) Work : 20mins Interval distance : 50m/yds Rest interval : 10sec/50 Pace : -50 steady -50 medium	Forearm paddles	•Maximizing the surface area available for propulsion •Applying force in the right direction	Use your forearm & hand as a unit to "drive" the water backwards "Imagine you are swimming in a very shallow pool" (Make sure the elastic straps are tight to avoid losing the paddles)	20
Total (mins)				45




HOW TO READ THE SESSION

The “Learning the basics” programs include dry land drills at the beginning of the session. You can do these exercises on the pool side if you find the necessary equipment. Otherwise you can do the drills at home or at the gym before going to the pool.

Swimming skill improvement program



Warm up before beginning your session!

				
<p>Swissball catch (swiss ball)</p> <p>->Work : 10 reps/arm ->Repeat : 3X ->3rd round close your eyes</p>	Swissball catch	<p>-Maximizing the surface area available for propulsion</p> <p>-Preparing to apply force in the right direction</p>	<p>Roll the ball forward and “wrap” your arm around it</p> <p>Notice how hand & forearm are nearly vertical</p> <p>Notice the high elbow position</p>	5
<p>Alternating :</p> <p>-1 length Doggy padddle -1 length Full stroke</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	Doggy paddle Full stroke	<p>-Maximizing the surface area available for propulsion</p> <p>-Applying force in the right direction</p>	<p>“Imagine wrapping your arm around a barrel”</p> <p>When you “doggy paddle” keep an eye on your elbows to see if they are near the water surface</p>	10
<p>Alternating :</p> <p>-1 length Underwater recovery -1 length Full stroke (snorkel + fins)</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	Underwater recovery Full stroke	<p>-Maximizing the surface area available for propulsion</p> <p>-Applying force in the right direction</p>	<p>“Imagine wrapping your arm around a barrel”</p> <p>Start applying pressure when your fingers are pointing down (not before!)</p>	10
<p>Forearm paddles (snorkel + paddles)</p> <p>Work : 20mins Interval distance : 50m/yds Rest interval : 10sec/50 Pace : -50 steady -50 medium</p>	Forearm paddles	<p>-Maximizing the surface area available for propulsion</p> <p>-Applying force in the right direction</p>	<p>Use your forearm & hand as a unit to “drive” the water backwards</p> <p>“Imagine you are swimming in a very shallow pool”</p> <p>(Make sure the elastic straps are tight to avoid loosing the paddles)</p>	20
			Total (mins)	45

HOW TO READ THE SESSION

Freestyle skill improvement program




Level : 1 "Learning the basics"
 Session : 1
 General focus : Propulsion
 Duration : ~50min

 Please study the PDF file



In this column you will find video links for each exercise which you can watch on the poolside with your smartphone or in the changing rooms before your swim.

Each video is short (approximately 1 min). All cues are visual. There is no narrative because swimming pools are often noisy.

		
<p>Swissball catch (swiss ball)</p> <p>>Work : 10 reps/arm >Repeat : 3X >3rd round close your eyes</p>		<p>nd "wrap" your arm around it eam are nearly vertical position</p> <p>5</p>
<p>Alternating : -1 length Doggy paddle -1 length Full stroke</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	<p>Doggy paddle</p> <p>Full stroke</p>	<p>*Maximizing the surface area available for propulsion</p> <p>*Applying force in the right direction</p> <p>"Imagine wrapping your arm around a barrel"</p> <p>When you "doggy paddle" keep an eye on your elbows to see if they are near the water surface</p> <p>10</p>
<p>Alternating : -1 length Underwater recovery -1 length Full stroke (snorkel + fins)</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	<p>Underwater recovery</p> <p>Full stroke</p>	<p>*Maximizing the surface area available for propulsion</p> <p>*Applying force in the right direction</p> <p>"Imagine wrapping your arm around a barrel"</p> <p>Start applying pressure when your fingers are pointing down (not before!)</p> <p>10</p>
<p>Forearm paddles (snorkel + paddles)</p> <p>Work : 20mins Interval distance : 50m/yds Rest interval : 10sec/50 Pace : -50 steady -50 medium</p>	<p>Forearm paddles</p>	<p>*Maximizing the surface area available for propulsion</p> <p>*Applying force in the right direction</p> <p>Use your forearm & hand as a unit to "drive" the water backwards</p> <p>"Imagine you are swimming in a very shallow pool"</p> <p>(Make sure the elastic straps are tight to avoid losing the paddles)</p> <p>20</p>
		<p>Total (mins) 45</p>

HOW TO READ THE SESSION

Freestyle skill improvement program

Level : 1 "Learning the basics" (pack 1)






Session : 1

General focus : Propulsion

Duration : ~50min



 Please study the PDF file : "Basic principles - Propulsion" before beginning your session!

				
<p>Swissball catch (swiss ball)</p> <p>>Work : 10 reps/arm >Repeat : 3X >3rd round close your eyes</p>	<p>Swissball catch</p>	<p>-Maximizing the surface area available for propulsion</p> <p>-Preparing to apply force in the right direction</p>	<p>Roll the ball forward and "wrap" your arm around it</p> <p>Notice how hand & forearm are nearly vertical</p> <p>Notice the high elbow position</p>	5
<p>Alternating :</p> <p>-1 length Doggy paddle -1 length Full stroke</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	<p>Doggy paddle</p> <p>Full stroke</p>	<p>-Maximizing the surface area available for propulsion</p> <p>-Applying force in the right direction</p>	<p>"Imagine wrapping your arm around a barrel"</p> <p>Apply pressure on your surface</p>	10
<p>Alternating :</p> <p>-1 length Underwater recovery -1 length Full stroke (snorkel + fins)</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	<p>Underwater recovery</p> <p>Full stroke</p>	<p>-Maximizing the surface area available for propulsion</p> <p>-Applying force in the right direction</p>	<p>"Imagine wrapping your arm around a barrel"</p> <p>Start applying pressure when your fingers are pointing down (not before!)</p>	10
<p>Forearm paddles (snorkel + paddles)</p> <p>Work : 20mins Interval distance : 50m/yds Rest interval : 10sec/50 Pace : -50 steady -50 medium</p>	<p>Forearm paddles</p>	<p>-Maximizing the surface area available for propulsion</p> <p>-Applying force in the right direction</p>	<p>Use your forearm & hand as a unit to "drive" the water backwards</p> <p>"Imagine you are swimming in a very shallow pool"</p> <p>(Make sure the elastic straps are tight to avoid losing the paddles)</p>	20
Total (mins)				45

In this column you will find the goal of the exercise and the sub-skills which are being developed

HOW TO READ THE SESSION

Freestyle skill improvement program

Level : 1 "Learning the basics" (pack 1)






Session : 1

General focus : Propulsion

Duration : ~50min



 Please study the PDF file : "Basic principles - Propulsion" before beginning your session!

				
<p>Swissball catch (swiss ball)</p> <p>>Work : 10 reps/arm >Repeat : 3X >3rd round close your eyes</p>	<p>Swissball catch</p>	<p>•Maximizing the surface area available for propulsion</p> <p>•Preparing to apply force in the right direction</p>	<p>Roll the ball forward and "wrap" your arm around it</p> <p>Notice how hand & forearm are nearly vertical</p> <p>Notice the high elbow position</p>	5
<p>Alternating :</p> <p>-1 length Doggy paddler -1 length Full stroke</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	<p>Doggy paddler</p> <p>Full stroke</p>	<p>•Maximizing the surface area available for propulsion</p> <p>•Applying force in the right direction</p>	<p>"Imagine..."</p> <p>When elbow...</p>	
<p>Alternating :</p> <p>-1 length Underwater recovery -1 length Full stroke (snorkel + fins)</p> <p>Work : 10mins Interval distance : 25m/yds Rest interval : 10sec/25 Pace : steady</p>	<p>Underwater recovery</p> <p>Full stroke</p>	<p>•Maximizing the surface area available for propulsion</p> <p>•Applying force in the right direction</p>	<p>"Imagine..."</p> <p>Start...</p>	
<p>Forearm paddles (snorkel + paddles)</p> <p>Work : 20mins Interval distance : 50m/yds Rest interval : 10sec/50 Pace : -50 steady -50 medium</p>	<p>Forearm paddles</p>	<p>•Maximizing the surface area available for propulsion</p> <p>•Applying force in the right direction</p>	<p>Use your forearm & hand as a unit to "drive" the water backwards</p> <p>"Imagine you are swimming in a very shallow pool"</p> <p>(Make sure the elastic straps are tight to avoid losing the paddles)</p>	20
Total (mins)				45

In this column you can find cues and analogies to help you.

It is better to focus on **one** cue at a time. You can change your focus from one length to the next.






HOW TO READ THE SESSION


The advanced sessions of the skill improvement program rely less on direct learning and more on the constraints led approach.




There are less cues. The emphasis is on using measurable outcomes to develop functional skills.

e-swim coach Freestyle skill improvement p

Level : 4 "Making skills more robust with constraints"
 Session : 1
 Duration : ~60min

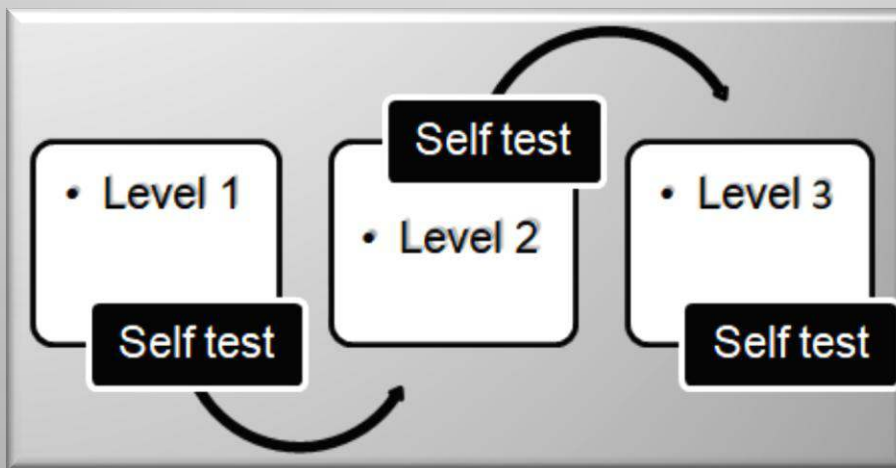
				
<p>Warm up : 12mins (low intensity)</p> <p>-50m/yds High head</p> <p>-50m/yds Low head</p> <p>-50m/yds Concorde drill</p>	<p>High head position</p> <p>Low head position</p> <p>Concorde drill</p>	<p>Increasing distance travelled per stroke</p> <p>Exploring the effect of head position on stroke count</p>	<p>The lower the stroke count the better</p>	12
<p>Sprint set</p> <p>Work : 8 repetitions Interval distance : 25m/yds Rest interval : 20sec/25 Pace : 4 stroke cycles fast, remainder easy</p> <p>4X Fists with parachute 4X Fullstroke parachute</p> <p>>Wall start >Use the same number of UW kicks/sprint >No breathing (Please note : 1 stroke cycle = 2 arm pulls)</p>	<p>Fists</p> <p>Parachute</p>	<p>Maintaining a high stroke rate & maximizing stroke length at the same time</p> <p>Learning how to use the forearms to generate propulsion</p> <p>The parachute constraint amplifies the water pressure felt on the forearms making it easier to perceive propulsion</p>	<p>Total distance covered with 4 stroke cycles (The farther the better)</p>	8
<p>Pace & stroke count set</p> <p>Work : 2 x 15mins Interval distance : 150m/yds Rest interval : 20secs/150 Pace : medium</p> <p>1" Round : forearm paddles Br.Ev.3 2" Rounde fullstroke Br.Ev.2</p> <p>>Maintain an even pace (check your times) >Use the same number of UW kicks/length >Count the number of strokes/length</p>	<p>Forearm paddles</p> <p>Fullstroke</p>	<p>Holding pace & improving distance per stroke at the same time</p> <p>Maximizing the surface area available for propulsion</p> <p>Learning to drive the water backwards with the forearm & the hand as a single unit</p>	<p>Holding the same pace for each repetition</p> <p>The lower the stroke count the better</p>	30
<p>Kicking set</p> <p>Work : 8min non stop Effort : 15sec strong / 15sec easy</p> <p>Vertical kicking</p> <p>>Easier version use fins >Difficult version use a weighted belt</p>	<p>Vertical kick</p>	<p>Improving leg propulsion & core stability</p>	<p>The higher your body position, the better your power & leg propulsion</p>	8
Total (mins) :				58

 Analogies

-  "Imagine you are swimming inside a tunnel"
-  "Imagine wrapping your arm around a barrel"
-  "Turn your head to breath mid-way through the pull"

HOW TO USE THE TESTS

Learning rate is individual, non-linear and cannot be predicted beforehand! The number of sessions you do a week is up to you, however the more consistently you train the faster you will improve your skills.



At the end of each level there is a self-test session to see if you are ready to move on to the next level and to identify your strong points and your weaknesses.

It is recommended that you repeat the sessions which focus on the skills which need more work before moving on...

EG.1 If you have difficulties with a streamlining test repeat streamlining sessions!

EG.2 If you have difficulties with a pacing test then repeat sessions which include pacing exercises!

CAN I COMBINE THE SKILL IMPROVEMENT SESSIONS WITH OTHER TRAINING SESSIONS ?

The skill improvement program includes changes in pace and the intensity increases from one level to the next. Although the program enhances fitness, the main goal is developing basic skills not peaking for competition.

If you do feel the need to develop extra fitness during the skill improvement program it is preferable to engage in cross training out of the water to improve mobility, strength and general cardiovascular fitness.

If you are a triathlete it is probably a good idea to do the physically demanding sessions when you run or on your bike.



Adding high intensity swimming sessions to the skill improvement program will interfere in the acquisition of new swimming skills. This is because when you train at high intensity you are simply going to recall your pre-existing habits and change little if any of your skills.