

101 Overview to INDOOR CYCLING



JOHNNY G
METHOD

Live. Change. Learn.™

INTRODUCTION

Toys have the ability to transform our lives in different ways and at different times.

After inventing my first bicycle I could not shake the memory of jumping out of my childhood box preparing myself to ride 500 miles at the age of 16 from Johannesburg to Durban, a 500-mile fantasy through the mountains and villages of South Africa.

Once a month - every Thursday evening - my father would bring home a European cycling magazine and leave it on my bed for motivation. Each morning at 5 am, before I would have to go to school, I would face a different form of adversity on the road: training 2.5 hours a day in the dark, chasing buses, drafting cars, racing possessed through my town in the freezing winter mornings on my bike, dreaming about the day I would face the greatest race of them all - the one against the clock - no one in front of me, and everyone behind.

In my wildest dreams I never thought that the first bike I invented would be a stationary one! It would be a bike that would get people fit and healthy without moving. This bike would evoke a feeling of joy a baptism of happiness.

I have always believed that cycling is about time, distance and tenacity.

To exploit our potential we need a tool that provides a greater opportunity than one we would normally be able to handle. The Johnny G Spirit Bike is this tool.

I would like to thank Michael Lin, chairman of the board at Dyaco international, for providing the resources and for believing in our dream to keep moving fitness forward, embracing bikes and the lineage that dates back 200 years.

- Johnny G

FOREWARD BY JORDAN G

For me, watching people of all shapes and sizes throw their arms in the air upon finding their inner champion, perfectly encapsulates what I know indoor cycling to be. It is, and has always been, more than physical exertion. It's therapy on a bike.

Indoor cycling is about far more than peddling - it's about pushing yourself through the discomfort of each ride to find your own personal finish line. The power of strength lies within our own personal weaknesses. It's about never giving up. While your legs may be burning, and your mind is wanting to quit; it is all within ourselves to keep moving forward. You don't need an instructor pointing out what movements to do. It is the act of choosing your own movements, that allow you to push through your own challenges.

There are countless programs based on rhythm, timing, in-your-face instructors and certifications that tell you what to do, and how to do it. They're all alike. Then there is US. Cultivated by a man who believes we can all Live. Change. Learn. This program is simple; it's about pushing yourself beyond your OWN limits. It is about allowing you; the rider; to overcome your challenges to improve your performance and allow the inner beast to shine in the best, most fit version of you.

It's simple. YOU, and the BIKE.

- Jordan G Payne

THE INDOOR GROUP CYCLING EXPERIENCE: WHO RIDES?

The range of participants at any one time can be from novice to experienced recreational athletes. The conditioning level of your riders will also vary depending upon their previous experience with the IGC mode of training. Even fit individuals will have a period of adaptation from other modalities of exercise to the bike. As they become more familiar with IGC they will become more efficient and comfortable with the activity. It is your responsibility to instruct all levels of riders in a safe and effective manner. Being sensitive to different learning styles and abilities will serve you well. (see *Principles of Motivational and Inspirational Coaching*). Key elements of monitoring your riders includes your understanding how a rider interfaces and interprets the information from the Johnny G Spirit Bike and their physical experience with each training session. An essential understanding of the components of the Johnny G Spirit Bike is critical to the success of both coach and rider. (see *Anatomy of the Johnny G Spirit Bike*).

A skilled coach will be able to accommodate anyone who wants to experience the *Ride of Truth*® Program. To do this, it is important to be knowledgeable not only in the principles of training, but also how to apply them to meet individual needs; and utilize all of the JGM Principles & Methodologies.

The obese population Mind. Body. Bike.

The rise in obesity in the United States over the past several decades is well documented by organizations such as the Centers for Disease Control. Although many factors can contribute to an individual's weight, exercise is a lifestyle modification that will improve overall health at any weight. It is not uncommon for individuals carrying excess weight to have comorbidities. A co-morbidity is a clinical condition that in and of itself can have a detrimental effect on someone's health if it is not well controlled. Examples of these high-risk conditions in the obese population can be Type 2 diabetes, hypertension (high blood pressure) and hyperlipidemia (high cholesterol). Specific guidelines regarding the individual's safe exercise practices should be provided with physician clearance if the individual has identified co-morbidities. These conditions require a coach to monitor exercise intensity to decrease the risk of exercise intolerance and promote a level of intensity that will have a positive overall effect. Generally speaking, the goal with the obese client is to initially build exercise tolerance at a low to moderate intensity. Deconditioned individuals will not tolerate high-intensity intervals initially and will require a preconditioning period for the *Ride of Truth*® Program as part of the Johnny G Spirit Bike.

Important: The weight limit of the bike is 350 pounds.

ANATOMY OF THE JOHNNY G SPIRIT BIKE

The Johnny G Spirit Bike is strategically equipped with a cockpit designed console to measure level, time, distance, cadence, watts and heart rate. In order for any individual to successfully complete a program that will improve their physical performance there needs to be an understanding of the metrics that show progression or regression. The utility of each measurement for the purposes of the program will be discussed in a later chapter.

On the console of the Spirit Bike you will see displayed measurements for Level (resistance), RPM, (revolutions per minute), Time (time spent riding), Distance (miles traveled), Watts (power output), Heart Rate (beats per minute). This console is powered by the rider. Pedaling continuously will keep the console lit so these measurements remain displayed. Information will be retained if the rider does stop pedaling or the instructor needs to get off his/her bike for up to 10 minutes.

Time: Refers to the length of the training and/or time trial session, not just how long the rider has been sitting on the bike. Initially as soon as a rider begins to pedal 40 rpms or more the console will light up and the following message will appear: 'Johnny G Method - The Ride of Truth' and the words 'Warm-Up' will begin to blink indicating that your bike is ready to ride then you will see the 'Press The Arrow Key When Ready to Go'. To begin the training ride press the start/pause button (>) again while continuing to pedal and "Enjoy The Ride" will display. Time will stop when hitting the same/pause button (>) prompting "End Workout" and then the training workout summary will display.

Distance: Knowing that the wheel of the Spirit Bike has a circumference of 58 inches, the console calculates the revolutions per minute (RPMs). It is tracking as the training ride progresses to display a total distance as if the wheel were actually moving on the road outdoors. Since every rider, and ride, is unique, the average distance will vary by ride. The distance is dependent on resistance (gear) levels and effort. Keep in mind that not all riders will be pedaling at the same cadence and/or level 100% of the time during the ride.

Cadence: More clearly defined, cadence is the pedaling rate. It is the number of revolutions (pedal strokes) of the crank per minute. There isn't a magic number for RPMs to target. The average cadence for most is somewhere between 80 - 100 rpms in a lower gear (simulating a relatively flat to flat road outdoors).

The best way for a rider to determine their average cadence in a lower gear and a higher gear is to record the average RPM (and average MPH) displayed in a 30 minute time trial (lower to mid gear) or power (higher gear simulating climbing) ride. The console workout summary can display average RPMs and MPH.

Watts: This is a measurement to quantify the rate at which energy is transferred. As it relates to cycling, the energy is transferred from your legs to the pedals. It can be used (indirectly) to measure the amount of work you are producing when you ride. This workload measurement is a measure of energy expenditure. When looking at watts within the Johnny G *Ride of Truth*® Program we will discuss it as a reflection of energy expenditure. Measuring a rider's output of watts is how professional cyclists train, but one does not have to be a professional to incorporate this element into their own personal training. Riders will be able to view their energy expenditure on the console of the Johnny G Spirit Bike, as well as the average watts within the ride's end workout summary.

Chapter 4

BIKE SET UP

Preparation for any new activity requires planning. One of the most important steps in preparing for participation in the *Ride of Truth*® Program becoming familiar with the Johnny G Spirit Bike™ and the proper set-up and positioning for riding. All of this is important in order to ride efficiently and to reduce the risk of injury.

The Johnny G Spirit Bike is equipped with pedals constructed with a solid metal platform with SPD clip and straps. Stiff flat soled sneakers will fit into the toe cage. A cleated cycling shoe will clip in to the SPD side of the pedal. Riders wearing sneakers should position the ball of the foot directly over the spindle of the pedal after entering the toe cage. Once the foot is in positioned, the strap should be tightly fastened so that the foot does not move during the pedaling motion. However, the strap should not be so tight that it causes discomfort or numbness in the toes. Riders choosing to wear cleats should a) be sure cleat is positioned under the shoe to match the angle in which he/she walks (i.e pigeon toed/toes angling in or duck footed/toes turned outwards). The SPD mount is already aligned over the spindle of the pedal on the Johnny G Spirit Bike™ ensuring that the rider's foot is positioned appropriately.

The Johnny G Spirit Bike is equipped with an anatomical relief-zone seat, designed specifically to protect the soft tissue of both genders.

Seat positioning on the bike has two settings: seat height and fore-aft position. To correctly dial into one's appropriate seat positioning, the initial step is to determine SEAT HEIGHT.

Step One

Position the saddle just about hip height by turning the knob on the seat column just one time pulling the pin out, and pulling the saddle gently back, then up or down. Be sure to secure the seat post prior to the rider sitting on the saddle by re-tightening the knob. Once rider is seated on the saddle, and prior to clipping into pedal, their heel should be placed on the pedal with the foot parallel to the floor. Then position the crank arms so that the foot on the pedal is in a 6 o'clock position. The knee on the extended leg should be slightly bent or relaxed so that the knee is not in a hyperextended or locked position. Make any adjustments to the seat height position to acquire this slight bend prior to moving on to determine the setting for the FORE-AFT POSITION. Note that there are numbers marked on the seat column that will indicate the setting for SEAT HEIGHT.

Step Two

To determine the FORE-AFT POSITION (forward toward handlebars or backwards away from handlebars) of the saddle, having rider toe into the strap or clip into the pedal. Set the cranks horizontally so that one foot is in a 3 o'clock position and angled as if one were standing still. Be sure to have some sort of plum line to aid in dialing into the best alignment. Hold the plum line in front of the kneecap so that the weight at the end of the plum line falls on the foot. The weight should be aligned over spindle of the pedal. The saddle will need to be adjusted either forward or back in order to achieve this set up. To make this adjustment on the Johnny G Spirit Bike™, turn the lever underneath the back end of the seat, and slide the saddle to its proper position. Be sure to tightly fasten the lever back to its locked position. Note the lettering on the slide (A thru H) of the saddle base and where the arrow aligns. This is the FORE-AFT setting. Both the height and fore-aft settings are a start and not written in stone. As one continues to ride and dial into proper riding form, minor adjustments may be necessary.

Chapter 4

BIKE SET UP

Step Three

Determining the HANDLEBAR POSITION for The Johnny G Spirit Bike which is equipped with a proprietary handlebar; designed specifically for the Johnny G Spirit Bike to allow for the preference and optional hand positioning of all riders. Start with the top of the handlebars even with the saddle and have rider place their hands on the handlebars aligned with the width of their shoulders. The height of the handlebars may be adjusted according to the riders comfort by turning the knob on the front of the bike frame, pulling it out and moving the handlebars. If someone has low back concerns, the height of the handlebars can be adjusted to a higher position. This can lessen the strain on the low back to diminish excessive forward flexion.

Step Four

As with the saddle, the handlebars on the Johnny G Spirit Bike can also be extended forward over the wheel or closer to the saddle by turning the lever to slide handlebars fore or aft. This is all based on the comfort of the rider. After a few rides with the initial four settings, the rider will need to be aware of any persistent back or any numbness within the arms and/or hands. This is an indication that the handlebars should be adjusted.

Hydration

Proper fluid balance is essential to life. You can survive for a few weeks without food, but only a few days without water before vital body systems begin to fail. Therefore, sufficient intake of water during any exercise routine is important. It is essential for indoor cycling as well.

Hydration plays a vital role in transporting oxygen, nutrients, and blood glucose to the body. Water also carries metabolic wastes such as lactic acid and carbon dioxide out of the body. Fluid balance is influenced by intake, the fluids that you drink, and output in the form of perspiration and urine. When the equilibrium is disrupted it can seriously impair your ability to perform at maximum potential. Poor hydration can result in fatigue and electrolyte imbalances. Electrolytes assist in muscular contraction, cardiovascular function and neurological function. An instructor or coach can see how if during exercise a participant is negligent with their fluid intake, it could impair their ability to move efficiently, maintain proper blood pressure and even think clearly. Poor hydration and improper fueling is often the cause for one to lack the stamina to keep going. The Johnny G Spirit Bike is equipped with two water bottle holders located on the handlebars.

The following fluid intake guidelines will help streamline the important points:

- Water is a good source of fluid replacement for exercise lasting less than one hour
- Begin exercise in a well hydrated state. A good guide is to check urine color. Pale yellow urine is a sign of a well-hydrated body, but dark yellow or amber colored urine is a sure sign of dehydration.
- During exercise, replenish with 4 to 8 ounces water or sports drink depending upon duration of the training session most of this will be done on the bike.
- Sip fluids during exercise, gulping will increase the volume of air that the rider takes in to the stomach and may cause bloating, distention and cramps.

Chapter 4

BIKE SET UP

- Flavored water and sports drinks (diluted or full strength) have been shown to encourage better intake as athletes drink more when fluid is flavored.
- If you are a “heavy sweater” you may require additional sodium. Large amount of electrolytes are lost through sweat. Avoid carbonated beverages as a hydration fluid. The gas in the drink can make you feel full and may discourage you from drinking enough fluid. Although, studies have not shown the effects carbonated beverages to decrease performance
- Keep track of your “dry weight” daily. You should not fluctuate more than a couple of pounds without explanation. If you are down, drink an additional 16 ounces prior to training.
- The ideal replacement includes components that improve absorption (like carbohydrate and sodium) and taste good!

Form / Movements (contraindications)

Getting Fit and Ready to Ride

There are numerous features within a cyclist’s physiology that are utilized when riding. A portion of the brain, the cerebellum, helps to coordinate movements, posture, and balance. The circulatory and respiratory systems (heart and lungs) are responsible for transporting nourishment and oxygen to a rider’s muscles as well as helping to remove any waste product away from them. Through the aerobic and anaerobic energy systems, muscles will contract in order to perform while enduring high amounts of work. This results in the creation of a lot of heat within the body. The skin (an organ) is responsible for keeping the temperature of the body regulated. The basis for all of these systems is the skeletal system, which supplies the structural foundation.

The muscles used while riding will be most obvious. Once a rider has acknowledged which muscles of theirs need to be strengthened and/or lengthened, it is recommended to implement a strength training program to complement and enhance their riding form.

Consider a cyclist’s anatomy when riding. The bent over position of a rider requires strong back muscles. The back muscles that help support the spine while bent over on a bike are the erector spinae, latissimus dorsi, trapezius. Trapezius muscles also help to support the neck while the neck is in extension to look forward onto the console. The abdominal muscles, that oppose the back muscles, provide anterior and lateral (front and side) body support. They are the rectus abdominis, obliques, and transverse abdominis (TVA). Keeping all of the muscles front, back, and side strong will help to eliminate any stress on a rider’s spine.

A rider’s arms come in contact with the handle bars. Although there is less stabilizing required of an indoor cycle; biceps, triceps, and forearm muscles alternate contracting and relaxing to assist in stabilizing the torso by way of the shoulder girdle. Due to the riding position of a cyclist, the shoulder is continuously under pressure. By strengthening muscles such as the rhomboids, rotator cuffs, and deltoids, stability of the torso will be enhanced.

Chapter 4

BIKE SET UP

The muscles within a rider's chest (pectoralis major and minor) help to support the back and shoulders allowing the rider to lean forward and to support the upper torso while climbing seated or standing.

In summarizing all of the previously stated information regarding musculature, it is apparent the cycling involves the entire body. Seeking to achieve balance and symmetry, the key to proper riding form, will ensure that each rider will gain power in their riding and limit the risk of injury.

Contraindications

The concept of Indoor Group Cycling, established and introduced by Johnny G himself, was and still is meant as an alternative to riding an outdoor cycle (road or mountain). Movements such as pedaling with speed, strength, and rhythm to cover the terrain presented. Contraindicated movements such as popping in and out of the saddle quickly, mimicking core work such as push-ups, and lifting hand weights of any kind can be dangerous to a rider. Any movement that would not be done outside should not be done inside.

Chapter 5

TRAINING

Training is the process in which an individual undertakes and adheres to a program in preparation for a specific event. Training strives for progression by imposing overload and specificity. For purposes of the Johnny G Method, the concentration of the following principles of training will be aimed towards the activity of indoor cycling using the Johnny G Spirit Bike, and the *Ride of Truth* Training Program & Method.

Periodization

Periodization is taking the training process and placing it into a system in order to achieve a desired outcome. A systematic application that is broken down into periods of time, concentrating on progressing through various aspects and components of training within the activity of indoor cycling. Training will progress from all-purpose to more specific, based on the desired outcome. Riders will work on becoming faster, stronger, and more efficient. Training in this way will ensure cycling participants remain engaged in each phase of training while being able to obtain measurable results. Periodization will also prevent overuse, overtraining, and plateaus.

Overload

The overload principle should be taken seriously when striving to achieve significant improvements in ones' fitness level and performance in cycling. It is the most important principle in a training program. Working within the Overload Principle means the body will adapt to the excess workload that it is challenged by. The human body can do amazing things. Simply put, the Overload principle is putting stressors on the body in order to acquire physiological and psychological changes which will enable the rider to manage the additional workload. When presented with a challenging load beyond its current capabilities, the body will be stressed to the point of fatigue. At this point recovery is necessary for the body to adapt to the overload so it can adhere to an even higher level of stress during the next cycling session(s).

Training programs that impose the principle of overload with the Johnny G Method is specific to improving the cyclist's performance of speed, strength and mental focus for completing the *Ride of Truth*. In order to determine the workload for each ride during periodization there needs to be an understanding of programming frequency, intensity, time, and type of training. This model is referred to as the FITT Principle and can be applied to each level of cyclist (beginner, intermediate, or advanced).

FITT (Frequency, Intensity, Time, and Type).

- 1) Frequency refers to the number of rides one will execute each week. The number of days necessary to rest so that the body can create muscle memory on the work imposed and recover needs to be planned and thought out.
- 2) Intensity is defining the amount of effort executed using the The Spirit bike during each individual ride. The intensity must be hard enough to create an overload on the body. The type of stress placed on the body through training should (and will be) varied. Placing too much excessive work can cause overtraining, injury and perhaps even burnout. A level of intensity hard enough to reach discomfort but sustainable should be the objective.
- 3) Time is the duration that each ride will last. Each ride is designed to be slightly different using blocks of minutes, resistance, cadence, distance and watts.

Chapter 5

TRAINING

4) Type as it relates to this model will be spent building and/or improving the aerobic base, anaerobic threshold, leg speed, strength and recovery. Practicing form and transition will also be variables targeted during workouts within four different type of rides.

- Open Road is an endurance ride, done at a moderate intensity challenges both mental and physical abilities to resist fatigue and improve the aerobic energy system as well as metabolism. When using Myzone, recommend consistency in blue/green.
- Mixed Terrain is performed with a higher intensity. This type of ride should include multiple intervals of extreme efforts followed by total recovery for the purpose of improving the anaerobic energy system. When using Myzone, we advocate using all color tiles; grey-red. The level, and RPM, predicts intensity. The rider varies exertion by monitoring their heart rate color.
- Hills - This ride is designed to develop the ability to use higher resistance levels at greater RPM's, to develop strength, power and tenacity. Ride in blue-yellow, and red depending on your periodization cycle.
- The Ride of Truth Time Trial is designed to be performed with the highest intensity and intention of the rider. Myzone max intensity that can be sustained for a set distance. (discussed in a later chapter)

Reversibility Principle

1) Reversibility within athletics states that any improvements made to one's level of fitness can be lost if training ceases. The opposite is also true meaning that once training resumes, restoring and/or improving fitness levels will become evident. Slow and steady! Stay consistent, focused, passionate and inspired.

2) The Johnny G Spirit Bike has been designed with components that will provide performance metrics. These metrics are accessible with each ride, telling the true story of the riders performance during each training session. Athletes of any level cannot improve what they cannot measure. Performance metrics such as, heart rate, distance traveled, levels (calibrated resistance), and watts will assist riders to train properly. Use of Components With-in Construction of a Ride. Performance can and should be measured by utilizing the components of the Spirit Bike; the level/gearing system, power meter (watts), and heart rate monitor. MyZone is the recommended activity tracker. Each of these mechanisms are the standard used within the sport of cycling to provide feedback on performance. An individual's intensity or effort (power and heart rate) is a result of variables such as gear and cadence (pace, rotations per minute). Whether the participant is a beginner (never experienced indoor cycling prior to riding JG Spirit Bike), each participant will ride at their own level, even though they are in a group. There is no competition, except for the competition you create for yourself.

There is a process for projecting performance goals in any physical activity or sport. This may include aerobic endurance capacity, reaching ultimate effort levels, and the ability to recover. Second would be an assessment of psychological commitment to staying focused, being relaxed mentally while being able to push physically. Technical skills such as riding form, pedal stroke, posture and most importantly bike fit are all components that influence the experience.

Chapter 5

TRAINING

Measuring the intensity while cycling is giving the cyclist an indication of what is going on inside the body. "Heart rate provides a guide for effort level, but power is the effort level" (Chappelle, 2006, p.40).

Be advised that heart rate readings are not only a response to physical activity, but can be affected by other internal and external factors such as: dehydration, lack of rest, anxiety, stress, illness, medications, caffeine and the external environment of temperature and humidity levels. Being in a state of overreaching or overtraining can portray a lower than normal heart rate reading. The body's nervous system is charged with governing and protecting the heart when it is under stressful conditions. Healthy recovery rates are something to pay attention to as this metric can indicate the body is under excessive stress in addition to exercise.

Rate of perceived exertion (RPE) also provide tremendous insight to the body's ability to perform under various levels of force. It is one of the oldest overall indicators of intensity. Eventually athletes learn how to distinguish what they are feeling during exercise using this information as another form of feedback. As an example, using a scale from 1-10 the individual can judge the effort level being performed. Then matching the RPE with the heart rate being displayed.

Rate of Perceived Exertion 1-10 scale

1-2: VERY EASY (50 - 59%MHR)

Starting the ride, very comfortable, conversing easily

3-4: EASY TO MODERATE (60-69%)

Comfortable; you could ride all day at this pace and carry on a conversation, but you're aware that you're actually riding a bike. Breathing rate begins to increase. This range is where your lower training threshold will fall.

5: COMFORTABLY HARD (70-79%)

Steady, sustainable, comfortably hard effort. There is a noticeable increase in your breathing rate, and if you talk, your speech will be slightly interrupted by the need to breathe. It takes focus and attention to maintain this effort level, but you could hold this for a while.

6-7: HARD (80%)

Work effort is starting to be difficult and uncomfortable. Breathing is rapid and steady, but not yet labored. You can still talk, but don't want to; if you do say anything, it will usually be very short sentences. This range will be where your upper aerobic training zone will fall.

8: VERY HARD (85-89%)

Difficult, challenging, uncomfortable - you cannot hold this work effort for very long. Your mental faculties are consumed around tracking your breath and keeping your pedaling consistent. Unless you are a conditioned athlete you cannot hold this for more the 1-3 minutes.

9: EXTREME (90%+)

Maximum effort, such as a hard sprint after a long race; talking is not an option, you're breathless. Training at this effort is not recommended unless you're a conditioned athlete.

Chapter 5

TRAINING

10: OVER EXTREME: BREATHLESS / DIZZY / NAUSEATED - STOP!

Utilizing a Heart Rate Monitor along with RPE and Power, can be very beneficial in determining effort, enhanced fitness level, depleted fitness level, and abnormalities or changes from the norm as it relates to physical functions of the body. Remembering that cycling is an aerobic activity utilizing oxygen to fuel the muscles. The role of the cardiovascular system is to deliver oxygen and nutrients to the working muscles. The heart IS a muscle, therefore the activity will not only make legs stronger the heart will gain strength as well.

The principles of training discussed in this chapter provides a framework for an instructor to create a meaningful and measurable experience for each rider. The following chapter will address the Principles of Motivational and Inspirational Coaching to be able to deliver this experience.

Chapter 6

FUNDAMENTALS OF COACHING

MUSIC

There are some motivational tools that can be very diverse depending on the audience involved. Music is a tool that distracts riders from fatigue, pain and aversion to work harder. Music elevates an individual's mood during exercise, increases endurance, and propels them to ride longer, faster and stronger without even realizing it.

A coach should be aware of the likes and dislikes of genre that will engage his/her riders so that each ride has a playlist that will encourage riders to stay engaged and on task. Songs, regardless of genre, should be reasonable in length so not to bore riders with a repetitive beat. Music will drive the purpose of the ride, creating a sense of motivation to ride faster, slower, climb up, roll down, or just ride easy. Music choices assist in the creation of intensity and energy proposed for the ride. Having a well constructed playlist will help foster the engagement and effort, OR take the rider's mind off the challenge occurring within their body.

COACHING

Coaching is a tool that motivates recreational and professional athletes in several ways. A coach must remember that every individual possesses different learning styles. Some riders learn visually, some audibly, and some kinesthetically. This is a fact that states a coach should communicate to all learners. Much of what is coached in any sport truly revolves around how the direction and purpose are communicated. Coaching styles may differ, but it is important to communicate in a manner that is authentic to his/her personality and purpose. Otherwise, those being coached will not take he/she seriously and fail to achieve the goal. (?? integrate language regarding audio coaching)

VISUALIZATION

Visualization is a powerful tool for most. The technology within the cockpit may display a rider's results and help he/she to collect information on performance. Technology however can not replace true life experiences of any ride. There is not a single electronic component that can substitute for an individual's physical and emotional response associated with exercising. Riding to really good music and connecting with a coach or fellow riders can enhance the individual experience. Although both the technology and coach have a significant role to be played with riding The Johnny G Spirit Bike.

Communication is a dynamic process. When coaching cycling (or any sport), mutual effort is necessary. Meaning, the coach must speak to those auditable learners, with clear and precise cues. For the visual learners, eye contact and a simple gesture along with the vocal instruction must be stated. Lastly, for the individual who must "feel" the move, the coach might need to gently touch a rider's shoulder for it to relax, tap the crown of his/her head to see that the rider is looking at the road and breathing. The effectiveness and success of any coach is to develop the trust and relationship with their riders.

Relating to those one coaches involves making *eye contact*. Whenever one individual communicates to another one on one, in order for the translation of message to be received as sincere and meaningful eye to eye connections between the two should exist. Making eye contact with another shows an interest in their well-being. As a coach, making eye contact when providing instruction and guidance portrays their warmth, personability and most of all confidence in their skills. Eye to eye contact also inspires a trust within the coach and rider. Therefore, the instructions presented along with eye to eye contact becomes impactful.

Chapter 6

FUNDAMENTALS OF COACHING

As much as a coach needs to speak their convictions and beliefs within a sport, they need to listen as well. Listening to what another individual says is the ability to actually “hear” what that person needs, wants, and/or desires. As a coach, it is important to listen to their athletes closely in order to respect their desires, input, and to meet their needs. Mutually the athlete/rider needs to listen and be open to what the instructor has to offer in order to lead them to their goals. Listening is a give and take as with any successful relationship.

In addition the idea of creating an environment in which each rider can begin move forward, improving their abilities. For some, that environment may mean conquering their fears of accomplishing their goal. Assisting the fearful rider to acknowledge their personal resources to take on the challenge. This experience may require them to shift their perspective and previous beliefs regarding their abilities. The focus is to forge ahead quicker, stronger, and with success. Heightening a training environment for most requires the acknowledgment of incentives that come with an improvement of fitness and health, regardless of where the rider has started in their journey. By dangling a carrot so to speak to slight improvements along the way can keep this type of rider engaged and committed. Probably the most important to many will be staying devoted to the goal. Creating an environment that builds upon one’s purpose for training, in addition to the aforementioned, will be motivating to all regardless of ability or experience. Within such environments, riders will tend to adhere to the strategies that will lead them to achieve their personal goals. A coach will play a key role in helping to develop a strong sense of purpose, reasoning for the effort to ride hard and balancing efforts with less intense rides to maintain and stabilize motivation.

An instructor’s comprehension of the athlete(s) goals and purpose for riding will only improve the athlete’s outcome. A coach needs to understand the objectives of the individual(s), and have a clear vision of the most effective method that will lead the individual(s) to understand all concepts involved in an indoor cycling program. Essentially leading them to obtain their desired journey.

If the outlook a coach has is clear and honest in regards to the individual’s goals, attitude, and abilities, it can be a recipe for a very positive outcome. This recipe should be delivered with affection. The tone of a coaches voice should be forthcoming, not harsh or intimidating. The mental and moral qualities, character, of coach should be aligned with the individual he/she is instructing. Lastly, having good humor, coaching with a positive temperament will create a platform in which everyone will feel comfortable to work and play for progress.

Expressing ideas, information, knowledge, thoughts, and feelings will all be a part of how each rider will become more familiar and closer to *The Ride of Truth*. Coaches have the potential to make changes in the lives of others. Being a great teacher, mentor and/or coach creates much more than physical results. By utilizing skills, tools, knowledge and passion a coach for the Johnny G Method will help to establish relationships, unique experiences, and memories connecting all to *The Ride of Truth* individually and collectively.

Since athletes of all levels learn in a variety of ways, coaches and teachers need to adapt their preferred style to the specific needs of the individual athletes. A coach’s ability to utilize a holistic approach requires his/her own awareness of tactical, technical, physical, and psychological development in order to provide effective communication.

Cueing...the words spoken to provide direction to the riders should be clearly stated. A coach can tell if he/she is an effective.

Chapter 6

FUNDAMENTALS OF COACHING

communicator if the response from the rider(s) is an obvious and positive one. For example, by coaching cyclists to relax and to pedal big circles on a climb, you may be able to see riders' form shift from mashing the pedals to a more consistent smooth cadence, using less effort to get to the top of the hill. Directions can be more specific. Such as, "slide forward and sweep back on your pedal stroke; relax your shoulders; keep your eyes focusing on the console". In addition these instructions should be delivered with conviction.

Voice/Tone when cueing must be positive in order to make a difference. Riding indoors is much different than being outside. Individuals who choose to ride in groups do so for a reason. They desire the companionship of others striving for similar goals and need the direction and motivation of a coach. In order to communicate cues and to effectively motivate, a coach should know how he/she sounds when coaching a ride.

Questions a coach will need to address are:

Is my voice clear? Are my inflections sounded at the right time in the right context of the direction(s) given? For example, when coaching the crossing of the finish line during a time trial ride, the rise in a coach's voice and the excitement should be inflected just as the riders are about to speed up, give it the gas, and cross the finish. "The finish is only 50 yards away, SETTLE BACK IN YOUR SADDLE, START DIGGING IN, GET READY - GOOOOO FOR IT!"

Does my tone reflect confidence? Assurance? Encouragement? Strength? Excitement? Or boredom? Coaching with a monotone voice and no emotion will motivate no one. A coach of any kind needs to interject his/her passion for the sport, the ride, the purpose of working for a goal for all. If it feels like work, it will not be fun or effective for the rider(s) or the coach.

A coach should be direct and forthcoming with the knowledge they have to offer. A coach should be happy, humorous, and entertaining; but be careful not to "excertain". Staying true to the sport of cycling indoors or out is what is important and effective.

Word choice should be instructional, constructive, and positive. For instance, when directing the rider to pick up speed, the words chosen to may be, "Get ready to increase your cadence by 3 to 5 revolutions per minute (RPMs)". Cadence is displayed with in the cockpit and these word should be recognizable, understandable, and attainable by the rider. If the desired outcome is to increase intensity, using words such increase your "heart rate", get yourself into the "yellow zone" (as prescribed within the MyZone App). Be specific! Usings words such as "kick it" can be very broad. Cueing with words such as "pedal faster" is more direct and clear.

Inspirational coaching aligns well with the Johnny G Method rider. In order to instruct and connect with riders, a coach of the JG Method begins his/her journey preparing to help motivate and inspire riders by first getting to know each of them. This will enable the development and creation of the environment that will allow challenges, recognition, appreciation and quality of riding to take place for all. As previously stated, riders will show up with a unique vision on the journey and as a coach you should honor all perspectives. Most will just be thankful for the time coaches spend with them in preparation for the Ride of Truth.

Chapter 6

FUNDAMENTALS OF COACHING

Providing feedback is recognizing the efforts of those being coached can not only be productive but is a tool in itself. Feedback provides the inspiration. When providing feedback, coaches should be aware that athletes of any level learn from intrinsic and extrinsic feedback. Intrinsic information is received by the athlete as a direct result of producing a movement through their senses. Such as feelings from muscles, joints and balance. Extrinsic information not inherent in the movement originates from outside the body, such as receiving feedback that they have successfully executed a skill or movement correctly. Equal amounts of intrinsic and extrinsic feedback should be provided.

Feedback should be provided in a timely manner, not too soon or too late so that the rider can process it and relate it to their performance. Coaches should utilize the K.I.S.S. principle with feedback: Keep It Short and Simple. Keep feedback specific and informational. "Relax your shoulders and keep your grip light on the handle bars".

In addition to speaking through cueing, feedback, and encouragement; remember that coaches also need to execute their listening skills. These skills will be put to use either before and/or after a training ride. All the information heard from an athlete should be processed by the coach and taken into consideration. Utilizing that information into the next ride and as part of cueing and feedback.

Some guidelines that may be helpful are as follows:

- Provide feedback that is formative, not summative (assessment of performance)
- Provide support
- Focus cueing and feedback on the task presently occurring
- Be honest
- Be aware of the responses from cues and feedback

Above all the relationship of a coach is one of mutual respect, support and integrity. Professionalism and transparency must be balanced in order to be effective and build a trusting relationship. The interaction, when executed well, will be rewarding for both parties. Remember the coaches goal is to bring the rider to their goal and bring the experience of the *Ride of Truth* to life.

Chapter 7

THE RIDE OF TRUTH

Johnny G's philosophy for this program is based upon accessing an individual's personal resources to overcome challenges. This requires commitment to the goal and to the work necessary to arrive at the finish line. The foundation for both gauging fitness and planning for improved fitness with the Johnny G *Ride of Truth*[®] program. The *Ride of Truth Time Trial* is based upon the cycling time trial; an experience where the rider is racing not against another rider, but rather against the clock. Focused on time and distance, The *Ride of Truth* is a unique experience to the Johnny G Method of training and differentiates the Johnny G Spirit Bike experience from other indoor group cycling practices.

Although the Johnny G Spirit Bike offers a number of metrics that can be utilized, the program uses these functions in a different way. The truth is emphasized in the riding experience. So unlike other power programs, the emphasis is less on the science of riding and primarily driven toward the experience of the rider and the interpretation of the available metrics as they relate to the total experience beyond somatic performance. In this way the Johnny G Method develops the rider in the physical, psychological and spiritual sense creating an internal journey for the individual. In essence the *Ride of Truth* becomes a metaphor for facing other personal challenges.

In the cycling time trial experience, it is difficult to gauge where you are in comparison to the larger group of riders because you are on the road alone. Your effort is 100% focused on the maximum effort you can make over the distance in order to cover that distance in the shortest time possible. So the goal is to dig in and go! Consistency in cadence and applying as much force per pedal stroke as the rider can manage at that cadence will get help them cover the goal distance for *Ride of Truth* in the shortest time possible. In short, power (watts) and speed (RPM) are the core metrics that can give the rider his/her measure of performance. Heart rate (HR) and Rate of Perceived Exertion (RPE) are the indicators of how much energy the rider expends and can be a reflection of the physiological and psychological stress the rider experiences in context of the ride. Although neither HR nor RPE measure power or indicate accurate improvements in performance, they are part of the individual assessment of a rider in the Johnny G Spirit Bike program. Think back to the discussion on the principles of training.

Simply put, the Overload principle is putting stressors on the body, in order to acquire physiological and psychological changes that will enable the rider to manage the additional workload. When presented with a challenging load beyond its current capabilities, the body will be stressed to the point of fatigue. At this point recovery is necessary for the body to adapt to the overload so it can adhere to an even higher level of stress during the next cycling session(s).

The intangibles of the *Ride of Truth* that is reflected in Johnny G's statement "the *Ride of Truth* time trial exposes both the strengths and weaknesses for people at any level to face themselves" and connotes the intensity of the work that this event is meant to be and indeed its very essence. Each individual will have to face their truth and as a consequence, find a way to access their personal resources both physically and mentally to overcome the challenge.

In order to embrace the mindset of the ride it will be helpful to understand the tangible dimensions of the rider's interaction with the Johnny G Spirit bike. Referring back to the display on the console of the Johnny G Spirit Bike, the following information will be emphasized to interpret your progress for the *Ride of Truth*:

Chapter 7

THE RIDE OF TRUTH

Time:

Time is used to benchmark improvement over a prescribed distance. For instance, your goal for a workout may be to cover 8 miles in a minimum of 30 minutes. In this example, you can see that for the purposes of the exercise prescription time is fixed. However, because some riders will be able to work with more power (watts), they will be able to accomplish the distance in less time thereby making time a variable in the context of the individual riding experience.

Distance:

When Johnny G built his first Indoor Group Cycling (IGC) training bike and introduced the workout to his friends in Southern California, he was often asked "how far did we ride in that workout?". At the time, it was difficult to estimate. In the past several years, the technology of many of the IGC bikes offer the answer to this question by closely estimating the distance traveled. In the Johnny G Spirit bike program, distance will be fixed in the workout prescription. Simulated terrain may change, power output may vary, but time and distance will be constants for each workout. For example the workout for a particular day may be prescribed as an 8 mile ride with 2 steep climbs to be reached in 40 minutes of less.

Watts:

On the Johnny G Spirit Bike power is measured in watts or the amount of force a rider exerts on the pedal for a particular distance.

$$\text{Watts} = \text{Force} \times \text{Distance}$$

As noted earlier, time and distance are foundational concepts in the Johnny G Spirit Bike training program. When adding time to the formula one can determine the work done over an interval of time:

$$\text{Power} = \text{Force} \times \text{Distance/Time}$$

You may be able to see that by considering time in the equation, the rider has a reflection of the stress being imposed. In addition, over a cycle of training (weeks or months) this measure may also serve as a reflection of improvements. So as a function of this program, power translates into a measure of whether there has been incremental stress applied as well as whether there has been an adaptation to the overload. When the average number of watts for a specified period of time is higher, the rider can quantify the improvement as long as the time remains constant in the comparison.

Let's break this down a little more with the specific intention of the riding experience in this program by discussing how these measurements relate to rides that focus on a time to distance method. Watts can significantly influence the amount of time that it takes to cover the prescribed distance. Going back to the example of an 8 mile ride: a rider with a cadence of 80 RPM at X watts may allow the rider to complete the 8 mile distance in 30 minutes. However take the same distance and a stronger rider with the same RPM at X watts and that rider will be able to go further which each pedal stroke and finish the 8 miles in less time. So, time will also be dependent on your power output over that distance. Keep in mind that in this case, power is a reflection the average measure of work you are doing over a certain period of time. The amount of force a rider can exert may change day to day based upon a number of factors including hydration, rest, illness, previous day's training, rider's positioning on the bike, and stress (both physical and mental as discussed in an earlier chapter).

Chapter 7

THE RIDE OF TRUTH

Pedal Speed/RPM (Cadence):

Another influence on the time it will take to cover the prescribed distance can be cadence. If the rider is able to pedal faster and maintain the same average power output, he/she will cover the distance in a shorter period of time.

Think of these two variables as working like a seesaw as they correlate to the prescribed rides designed within the Johnny G Spirit Bike program. If one or the other of these variables changes it can affect the rider's overall time to distance. So if in order to increase cadence the rider drops a level on the Johnny G Spirit bike resistance system there is no change in the amount of force the rider exerts on the pedal.

↑ Cadence + NO Change in Level → ↑ Watts = Faster time to distance

↑ Cadence + ↓ Change in Level → ↓ Watts = Slower time to distance

↓ Cadence + NO Change in Level → ↓ Watts = Slower time to distance

↑ Cadence + ↑ Level → ↑ Watts = Faster time to distance

Heart Rate and RPE:

Heart rate and RPE were discussed in an earlier chapter. Both are indicators of the amount of energy expended while engaging in the ride. In addition, quality of the recovery as it relates to your energy in the post ride period can be appreciated with the recovery heart rate. In this program, heart rate ranges are used to reflect the level of energy expended during a ride with defined time and distance parameters and to track recovery heart rate as a measure of overall cardiovascular fitness. In short, recovery heart rate can be considered an indication of cardiovascular fitness by measuring the number of beats dropped within a minute of the cessation of hard exercise. Your heart rate drops most sharply in the first minute after the stress of exercise. A heart rate decrease of 20 beats or more within the first minute post exercise should continue dropping with each consecutive minute until the heart rate is within normal limits. This is considered normal, but a drop of less than 12 beats in that first minute after the cessation of exercise is considered abnormal. As a matter of monitoring progress, heart rate recovery should also be assessed. The more beats you drop in that first minute post exercise, the fitter you are from a cardiovascular perspective. In addition, a better recovery heart rate over time may indicate cardiovascular adaptation to imposed stress. Although monitoring heart rate is helpful, there are a number of drawbacks to using this tool as the be all and end all of training metrics. Factors such as dehydration, stress, medications, environmental conditions, overtraining and a number of other elements can influence heart rate. With that many variables, heart rate becomes a part of the bigger picture when interpreting the numbers on the console, but not the whole story. Rate of perceived exertion is also not an exact science, but nonetheless, should be considered. As a personal reflection of the effort you are making to do the work, this method quantifies the quality of your effort on a numeric scale as previously discussed. Like heart rate, perceived exertion can be influenced by a number of things like environment conditions, emotions and on some days, motivation to ride. That is why it is important to understand motivational methods when coaching a rider. A RPE that may have otherwise caused a rider to quit can be overcome with the right coaching techniques.

References

- Cole, C. R., Blackstone, E. H., Pashkow, F. J., Snader, C. E., & Lauer, M. S. (1999). Heart-rate recovery immediately after exercise as a predictor of mortality. *The New England Journal Of Medicine*, (18), 1351
- Archer, S., JD, MA.(Winter 2018). Go to the head of the class. *American Fitness*, 36(1), 36-41.
- Cassidy, T., Jones, R., Potrac, P. (2016). *Understanding sports coaching* (3rd ed.). Abingdon, Oxon: Routledge.
- Chapple, T. (2006). *Base Building for Cyclists*. Boulder, CO: VeloPress.
- Coker, C. (2004). *Motor Learning and Control for Practitioners*. New York, NY: McGraw-Hill.
- Byrant, C.X., Green, D.J., (Eds.). (2003). *ACE Personal Trainer Manual: The Ultimate Resource for Fitness Professionals* (3rd ed.). San Diego, CA: Printed in USA.
- Ertl, D. (2009). *101 Cycling Workouts*. Garden City, NY: Morgan James Publishing.
- Friel, J. (4th ed.). (2009). *The Cyclist's Training Bible*. Boulder, CO: VeloPress.
- Miller, S., Hill, P. (1999). *Sport psychology for cyclists*. Boulder, CO: VeloPress.
- Popowych, K. (2016). Technology trends in indoor cycling. *IDEA Fitness Journal*. (March), 58-60.
- Sleamaker, R., Browning, R., (Eds.). (1996). *Serious Training for Endurance Athletes*. Printed in United States of America. Human Kinetics.
- Sovndal, S. (2009). *Cycling anatomy*. Champaign, IL: Human Kinetics
- Sovndal, S. (2013). *Fitness cycling*. Champaign, IL: Human Kinetics
- S.P.O.R.T. Principles of Training. Retrieved from: <http://teachers.sheboygan.k12.wi.us/ateunissen/documents/SPORTPrincipleofTraining.pdf>
- Williams, J.M., (2010). *Applied Sport Psychology: personal growth to peak performance*. New York City, NY: McGraw-Hill Companies.