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Behavioral Coaching

by
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University of Mary

Effective behavioral coaching, as defined by Martin and Hrycaiko (1983), refers to "the consistent application of principles of behavioral psychology for the improvement and maintenance of athletic behavior" (p. 10). This process, which "emphasizes careful application and continuous evaluation of sensible coaching strategies" (p.17), is characterized by six principles. The guiding principles include: measurement of athletic performance; distinction between developing and maintaining behavior; encouragement to improve against performance; emphasis on coaching as a science; behavior modification for the coach; and social validation (Martin & Hrycaiko, 1983).

Significance

This article will focus on the behaviors and behavioral modification of coaches. As such, it is the intent of the writer to examine methods and procedures designed to enhance or facilitate the basic instructional effectiveness of coaches. Ultimately, these processes of improving instructional effectiveness may facilitate the maximal development of individual athletes and athletic teams.

Assessment of Coaching Behavior

Behavioral Analytic Focus

The study of coaching behavior is embedded in the work of Tharp and Gallimor (1976). These two educational psychologists observed, coded, and analyzed the practice coaching behavior of the legendary John Wooden during his final season as UCLA's head basketball coach. The underlying rationale for their study was to capture the interpersonal behaviors associated with a highly successful coach and

Tharp, R. G., & Gallimore, R. (1976, January). What a coach can teach a teacher. Psychology Today, pp. 75-78.

Ziegler, S. G. (1978). The effects of factual feedback and factual feedback with social reinforcement on a volleyball coaches behavior (Doctoral dissertation, West Virginia University, 1978). Dissertation Abstracts International, 39, 1424A-1425A.

Strength Training Q & A #5

by
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What's the best way to do a situp?

There are many ways to do a situp but some variations are safer and more beneficial than others. First of all, make sure that you never perform a situp with straight legs. If you were to lie flat on your back with your hips and knees in an extended position, you'll notice that there's an arch in your lower back area. This creates tension and compressive forces in that region. In addition, your psoas muscle (one of your hip flexors) is stretched out and tugs on your lumbar spine. On the other hand, when your knees and hips are bent and supported, your psoas muscle is relaxed. This also flattens the lumbar curve and decreases the spinal load. In fact, using computer simulation, two researchers (Johnson and Reid) showed that compressive forces were reduced by 18 percent and shear forces were reduced by 97 percent during the performance of a situp exercise with the knees and hips flexed at 90 degrees.

Another point to consider is that your abdominals are used primarily during the first 30 degrees of the situp. Thereafter, your hip flexors accept most of the workload. For this reason, a partial situp -- typically referred to as a "crunch" or a "trunk curl" in weight room jargon -- should be substituted for a full situp. This limited range movement will target your abdominals and reduce the involvement of your hip flexors. It should also be noted that abdominal activity is greater when the feet are not held or fixed.

To maintain tension on your muscles throughout the movement, don't let your shoulders touch the floor between repetitions. Moreover, keep your chin tucked in to your chest during the exercise. This will prevent you from snapping your head forward while doing situps and using your head to build momentum. Tucking your chin will also help you maintain a flat lower back throughout the movement.

Lastly, situps should not be performed in a rapid, ballistic manner. Explosive movements create momentum which removes tension from your muscles and makes the exercise less efficient. More importantly, explosive movements can place excessive stress on the posterior structures of your lumbar spine and may ultimately lead to its degeneration.

Let's put all these ingredients together and sketch a biomechanical portrait of how a situp should be done. Lay on the floor and place the backs of your lower legs on a bench or a stool. The angle between your upper and lower legs should be about 90 degrees. Likewise, the angle between your upper legs and hips should be about 90 degrees.

Place your hands between your knees with your arms fully extended. Tuck your chin in to your chest so that your head is off the floor. To perform the movement, bring your torso up to your legs without snapping your head forward, pause briefly in this position and then return your torso back to the starting position. Perform the next repetition immediately after the bottom portion of your shoulder blades touches the floor. Your hands should slide back and forth between your knees with your arms at full extension during each repetition.

How long should a strength workout last?

Your body prefers to use carbohydrates -- stored as glycogen in your muscle and glucose in your liver and bloodstream -- as its primary fuel during intense exercise. After about one hour of intense activity, your body exhausts these carbohydrate stores and goes after a secondary source of energy: proteins. The problem is that proteins are necessary for you to resynthesize muscle tissue. When you break down proteins for fuel, you're creating a situation much like that found in cases of starvation. For this reason, it's not a good idea to go beyond about one hour of intense exercise.

What's the best way to improve my technique during a sport skill?

There are two requirements necessary for you to increase your efficiency at performing sports skills. First of all, you must literally practice the motor skill for thousands and thousands of task-specific repetitions. Each time you do the skill it must be done with perfect technique so that its specific movement pattern becomes firmly ingrained in your "motor memory." The skill must be practiced perfectly and exactly as you would use it in competition. Remember, practice makes perfect . . . but only if you practice perfect.

Secondly, you must strengthen the major muscle groups that are used during the performance of that skill. However, it should not be done in a manner that mimics a particular sports skill so as not to confuse or impair the intended movement pattern. A stronger muscle can produce more force; if you can produce more force, you'll require less effort and be able to perform the skill more quickly, more accurately and more efficiently. But again, this is provided that you've practiced enough in a correct manner so that you'll be more skillful in applying that force.

If you want to improve your jump shot, for example, you've got to practice you jump shot in the same way that you might use it in a game (i.e. against a defender, off the dribble, etc.) and with regulation equipment (i.e. a regulation size basketball, a standard height basket, a regulation diameter hoop, etc.). Finally, you must strengthen the muscles used in a jump shot, namely your hips, legs, upper torso and arms.

Incidentally, if you happen to lift weights immediately before performing a sport skill it will upset or "throw off" your technique. However, the effect is only temporary -- your "touch" will return as soon as your neuromuscular pathways adjust to the unfamiliar fatigue. In other words, strength training won't ruin your skill.

About the Author

Matt Brzycki has been the Strength Coach and Health Fitness Coordinator at Princeton University since August 1990. Coach Brzycki has authored more than 90 articles on strength and fitness and a book, A Practical Approach to Strength Training, which is in its second edition. He has also coauthored the book Conditioning for Basketball with Shaun Brown, Strength Coach for the University of Kentucky basketball team.

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