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The Forgotten Factor -- Interpersonal Communication in Coaching H.S. Football

by

Terry R. Englund

"Effective Communication is Paramount to Have Success" --- Coach Lou Holtz

To be truly successful in the high school football coaching profession, a coach must be able to transmit to his players his philosophy, system, methods, and expectations. The quality of the coaching performance depends a great deal upon a coach's ability to pass on his personal knowledge of the game to his players. What a particular coach knows about the game is of little value or consequence unless he is able to teach it to the high school athletes who play the game. Similarly, the most effective teachers in school are not necessarily the ones who possess the most intelligence, degrees, or knowledge, but the best teachers appear to be those who effectively communicate with their students, read the responses of their students accurately and adjust their messages accordingly, and who motivate their students to learn. If we take the fundamental position that a coach is first and foremost a teacher, then it should be readily apparent the significant role that communication plays in coaching football.

To understand the role of communication in successful coaching it is important to accept the premise that language is the most central aspect of any organization. Language can be defined as a system of symbols, oral or written, used by members of a social community (in our case the high school football team) in a fairly standardized way to call forth meaning. Symbols in the football

Strength Training Q & A #13

by
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How is it that the Chinese women distance runners are suddenly breaking all these records?

There's as much skepticism as there is awe surrounding the recent accomplishments of China's female distance runners who have been shattering world marks with unheard of times. In August 1993, they won 6 of the 9 medals awarded in the 1,500, 3,000 and 10,000 meter races at the 1993 World Track and Field Championships in Stuttgart, Germany. At the Chinese Seventh National Championships in September 1993 -- in which the Chinese set 3 world records in 8 days -- their coach credited their success to "a diet of stewed turtle, caterpillar fungus and hard work." In January 1994, however, chinese sports officials slapped bans of between 2 to 4 years on 24 athletes -- including one Olympic medalist, 6 track and field athletes and 1 swimmer -- who tested positive for steroids and banned substances the previous month. In an anonymous editorial, a Chinese newspaper also admitted to their country's pervasive drug problems. Perhaps China's recent success can be attributed to the hiring of former Eastern European coaches who have shared their knowledge of training techniques and, unfortunately, their knowledge of drugs.

You've said that explosive training doesn't develop fast twitch muscle fibers. If so, how come studies show that the top Olympic-style weightlifters -- who use explosive training methods -- have such a high percentage of fast twitch fibers?

If a study shows that the top performers in a certain sport or event possess distinct anatomical traits or specific biochemical characteristics, it doesn't necessarily mean that those biological peculiarities were developed -- or even enhanced -- by their particular training methods. For example, if you were to gather some anthropometric data on elite swimmers, you might discover that most of them have much wider hands than the average person. Does this mean that swimming increases the width of the hands? Of course not. Having wider hands is an inherited trait and provides a biomechanical advantage that allows swimmers to propel their bodies through the water more efficiently.

Athletes who are highly successful in a sport or event are the cream of the crop. They've polished their skills to perfection and possess all the physical, physiological, psychological and neurological qualities that are essential for excelling at the highest levels of competition. Those athletes who are in short supply of the qualities that are necessary to be successful at a particular sport have been systematically weeded out at the lower levels of competition. The sport of Olympic-style weightlifting involves movements that must be executed with great strength, speed and power. Having a high percentage of the so-called fast twitch (FT) muscle fibers is a prerequisite for success at Olympic-style weightlifting because these particular muscle fibers generate high levels of force and contract at rapid speeds of movement. It may be true that elite Olympic-style weightlifters have a high per-

centage of FT muscle fibers. However, those athletes are the survivors of a selective weeding out process of which a predominance of FT muscle fibers was a major criterion. Stated in other terms, any athlete with a less-than-favorable fiber type mix for successful weightlifting (i.e. a low percentage of FT fibers) has been eliminated well before reaching a world-class level. Finally, this high percentage of FT muscle fibers was not produced or enriched by performing explosive movements. Rather, this predominant muscle fiber type was inherited from their ancestors -- like the wide hands that were inherited by the elite swimmers.

What do you think about performing partial repetitions?

Exercising throughout a full range of motion will allow you to maintain (or perhaps increase) your flexibility. Furthermore, it ensures that you are exercising your entire muscle -- not just a portion of it -- thereby making the movement more efficient. Indeed, studies have shown that full-range exercise is necessary for a full-range effect. In their article, "Specificity in Strength Training: A Review for the Coach and Athlete" (**Canadian Journal of Applied Sport Sciences** 6, no. 2), Sale and MacDougall examined the literature concerning partial or limited range movements. Their review suggested that exercising with partial movements generated a training response that was specific to the range of movement involved. In other words, a person will only gain strength in the range of motion that is exercised. So, a limited range movement creates a limited range effect. A recent study by Graves et al, published as "Specificity of Limited Range of Motion Variable Resistance Training" (**Medicine and Science in Sports and Exercise** 21, no. 1), also concluded much of the same: The training response is angular-specific.

In addition, my guess is that partial movements do little to prevent injury and may, in fact, encourage injury. If you're in the habit of performing partial repetitions throughout your strongest ranges of motion while doing nothing for your weakest ones, you're creating a greater imbalance of strength within your range of motion which may precipitate an injury. Becoming stronger over a limited range of motion may also produce a false sense of security and lead to an injury from attempting to lift a weight that you're not really ready for. Remember, a chain is only as strong as its weakest link.

This does not imply that you should avoid limited range movements altogether. During rehabilitation, for example, you can exercise throughout a pain-free range and still manage to stimulate some gains in strength. However, full range movements are more productive and should be performed whenever possible.

About The Author

Matt Brzycki is the Coordinator of Health Fitness, Strength and Conditioning Programs at Princeton University. Coach Brzycki has authored more than 120 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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