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hen the U.S. men's basketball team takes the court on August 6, at the Olympic Games in Rio de Janeiro, its most powerful asset will be a five-foot 10-inch grizzled veteran with an unmatched record of wins. That would be coach Mike Krzyzewski, who led Team USA to Olympic gold in 2008 and 2012. Of the 76 games played under the watchful eye of "Coach K," the national squad won 75. As head coach of Duke University's Blue Devils for 36 years, he has a greater number of wins—more than 1,040 than any other Division I basketball coach in the history of the National Collegiate Athletic Association. He is second all-time in national championships, with five victories.

What, apart from staying power, does it take to stack up that kind of record? Sports psychologists have been examining that question for decades. Much research has focused on what it means to be a great "leader," but despite a multibillion-dollar industry of books and seminars on the subject, the concept of "leadership" remains nebulous, according to many sports psychologists. "We now know there is no one set of attributes that all great leaders possess," explains Daniel R. Gould, a professor of applied sport psychology at Michigan State University. Instead what seems to matter most is the kind of relationship a coach develops with his or her ath-

FAST FACTS

A WINNING STRATEGY

- Disciplinarian coaching is falling out of favor as more and more coaches realize the value of a more psychologically nuanced approach.
- Many Olympics-level coaches emphasize the importance of relationships among players on a team and between coach and athletes.
- Successful coaches also encourage autonomy, an essential pillar of self-motivation.

letes and the ability to encourage autonomy and nurture motivation.

Coach K would not disagree. He has attributed his success, at least in part, to an epiphany he had while observing his family at the dinner table. Years ago he noticed how his wife, Mickie, and their three daughters engaged with one another; how each showed interest in the others' day; how in tune they were with one another's feelings and the feelings of others. Krzyzewski gradually developed a coaching philosophy and style built on solidifying his relationships with players and listening to them.

Despite the time-honored tradition of coaching à la drill sergeant, the disciplinarian style is gradually shifting toward this more psychologically nuanced approach, which is supported by volumes of research. That is not to say a good old-fashioned, foul-mouthed, locker-room ream-out is off-limits, but at the same time coaches at the pro and Olympic level know it is most effective to tap into the psychological dynamics of human social interaction—whether coaching a team or an individual athlete.

The Roots of Good Coaching

Good coaches are, above all, experts in motivation—an area that has been studied by psychologists for decades. Foundational work dates back to 1985, when Edward L. Deci and Richard M. Ryan, both at the University of Rochester, published a classic paper laying out what they called self-determination theory, a psychological model suggesting that much of our behavior is guided by internal motivations as opposed to external cues. Based on their own work and that of others, the authors identified three requirements—competence, relatedness and autonomy-that drive self-determination and that are essential to maintaining psychological health. Their ideas are now accepted as dogma and have largely been adopted by sports psychologists, many of whom believe that targeting these three areas is the key to effective coaching.

Competence is the most obvious goal of athletic training—becoming a winning athlete clearly requires a dedication to physically mastering your sport. Recent research shows that when coaches and teachers help athletes and students to become more competent, other aspects of the trainee's mindset improve, too. Encouraging competence drives motivation and improves mental state, concluded a 2007 study by psychologist Roch Chouinard and his colleagues at the University of Montreal. They reported that students intent on mastering a particular area of mathematics—a mindset that can be encouraged by teachers—put signifi-

46 SCIENTIFIC AMERICAN MIND JULY/AUGUST 2016

OUR DESIRE TO FORM MEANINGFUL RELATIONSHIPS POWERFULLY INFLUENCES OUR INTERNAL MOTIVATION.

cantly more effort into learning. Work published in 2015 in the *Journal of Human Kinetics* by a Spanish team found that athletes' perception of how competent their coach thinks they are has more influence on self-image than the athlete's own perception of competence.

"The ability in a coach to build skills in their athletes and pass on new or helpful information is a really important aspect of coaching," says senior U.S. Olympic Committee sports psychologist Sean McCann, In other words, athletes want to feel that their competence is continually improving because of their coach's expertise. "I've seen this even at the national level: if athletes don't feel like they're learning something from a coach, it won't be an effective coach-player relationship."

It's All about the Relationship

It takes more than technical know-how to cultivate that relationship, however. Sports psychologist Jonathan Fader is a master. Visit him in his Manhattan office, and he will listen intently to what you have to say, respond thoughtfully and praise your accomplishments, but not before he eagerly invites you to play Ping-Pong on his transformable office table (the leaves retract to reveal paddles and balls). Ginsusharp, irreverent and magnetic, Fader embodies the kind of relatability that he espouses in his work with top athletes and coaches.

A long line of psychological, evolutionary and anthropological research supports Fader's emphasis on relatedness. It shows that our desire to form meaningful relationships powerfully influences our motivation. Work in the 1970s by psychologists Rosemarie Anderson, Sam Manoogian and J. Steven Reznick found that children given an engaging task in the presence of an adult who ignores them exhibit far less internal motivation than those in the presence of a responsive adult—call it "Hey, Mom, watch this!" with a bit of academic rigor. Similarly, in 1986 Ryan and psychologist Wendy S. Grolnick,



now at Clark University, published a study showing that students who perceive their teachers as being cold and uncaring are significantly less motivated to learn and explore than their peers.

In recent years coaching research has uncovered a similar dynamic. A study by University of Wyoming sports psychologist Tucker Readdy, published this year in *Research Quarterly for Exercise and Sport*, used simple periodic interviewing to assess motivational influences in a small sample of cheerleaders. Both competence and relatedness with their teammates and coaches appeared to work synergistically to enhance motivation.

"Performance coaching is largely about relationship development and enhancing intrinsic motivation," Fader says. "We know that people who

Pia Sundhage, who coached the U.S. women's soccer team to Olympic gold in 2008 and 2012, enthusiastically joins players in practice and celebration.

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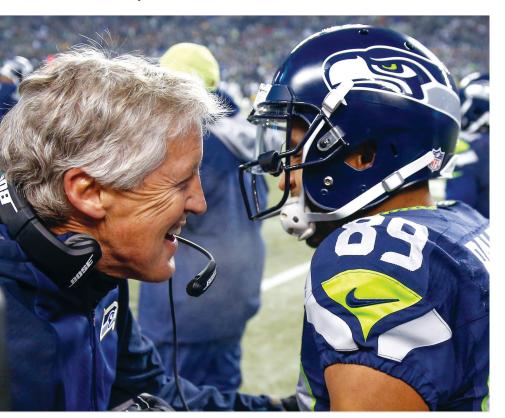
deliver information in an interactive and relationship-based way have the most success. If I can convey information to you in a way that allows you to participate in the information giving—for example, as with Socratic questioning or pulling from the person rather than just telling them what to do—you're likely to be more effective."

Yet, Fader believes, a surprising number of coaches do not get this. "I tend to mainly see screamers when I work in college athletics," he says. "You probably can't survive coaching like that at a big-league level. If you've gotten to a pro level and not realized the importance of creating relationships and focusing on the positives, your chances of success aren't nearly as good."

McCann concurs: "Relationship building is really essential if athlete and coach have to be around each other for more than a couple of years. There needs to be some level of mutual genuine respect."

Both psychologists emphasize that part of building a relationship is focusing on the positives, with McCann citing work from the 1990s by psychologists Ronald Smith and Frank Smoll of the University of Washington. Their findings support the so-called sandwich method of performance coaching, in which constructive criticism is bookended by praise. "If a kid misses a fly ball, say, 'Hey,

Pete Carroll, who led the Seattle Seahawks to two Super Bowls—and a 2014 victory—is known for encouraging players' individuality and autonomy.



good hustle, but remember you really got to keep your eye on the ball, but again good hustle,'" he explains, noting that the approach "increases motivation and the development of specific skills and decreases anxiety."

Fader agrees that this approach reduces shame and embarrassment that might result from overly harsh criticism. "If I'm going to talk to a quarterback or a pitcher and the first thing I bring up is what needs to changed, it's not going to work," he cautions. "The best coaches start by saying something positive. People need to feel like you're on their side before they're willing to accept what you're saying."

Bossy Coaching vs. Instilling Autonomy

The last component of self-determination theory—autonomy—is perhaps the best studied, at least in terms of assessing different coaching styles. In the 1960s American psychologist Richard De-Charms introduced the idea that competence alone is not enough to boost intrinsic motivation and that it must be accompanied by the perception of autonomy. This idea has since played out in a host of research that compares "autonomous-supportive" environments—in which people or players have a perceived control over their decisions and behav-

iors—and more "controlling" approaches in which those being coached simply follow orders.

Much of the early work in this area focused on how students learn. Several studies published in the 1980s, including some by self-determination theory developers Deci and Ryan, found that students' internal motivation and educational curiosity were stronger when teachers supported their autonomous efforts. Those under more strict control by teachers lost initiative and did not learn as effectively. This work also showed that children of controlling parents were less likely to spontaneously explore and attempt to master new skills.

The autonomous-supportive philosophy usually comes out on top in athletic coaching as well. A 2003 review by Geneviève A. Mageau and Robert J. Vallerand, both then at the University of Quebec at Montreal, published in the *Journal of Sports Sciences* looked at the impact on ath-

48 SCIENTIFIC AMERICAN MIND JULY/AUGUST 2016

"THE BEST COACHES START BY SAYING SOMETHING POSITIVE. PEOPLE NEED TO FEEL LIKE YOU'RE ON THEIR SIDE ... TO ACCEPT WHAT YOU'RE SAYING." —Jonathan Fader

lete performance when coaches employed various autonomy-supportive behaviors, such as acknowledging their players' perspective, avoiding excessive controlling behaviors, and providing athletes choice and opportunities for independent initiative. These qualities were associated with greater intrinsic motivation in players, as measured by behavioral observation and self-report and, thus, by extrapolation a higher likelihood of success on the field. A 2015 study by Texas State University professor Lindsay E. Kipp, published in Sport, Exercise, and Performance Psychology, assessed the mental wellbeing of 174 adolescent female gymnasts using surveys that evaluated the three aspects of self-determination theory. Kipp found that an environment that supported autonomy predicted increased perception of competence among the athletes. Furthermore, higher perceived competence predicted greater self-esteem and fewer eating-disorder symptoms, to which young gymnasts are especially vulnerable.

From 2012 to 2013 Ken Hodge, a professor of sports and exercise psychology at the University of Otago in New Zealand, worked alongside the 2011 world champion All Blacks rugby team to study the effectiveness of various coaching strategies. He notes that a controlling environment can in some cases boost short-term performance—and help win a match here and there. Yet he concluded that authoritarian coaching—and the manipulation, shame and negative feedback that often come with it—can ultimately hinder winning and hurt player well-being.

"My research has shown that in the long term, using an autonomy-supportive leadership style does not compromise winning/performance and has added benefits in terms of personal development for players," Hodge says, likening this style to

that of one of his favorite big-name coaches, Pete Carroll of the Seattle Seahawks. In a 2014 player poll, Carroll was voted the most popular coach in the National Football League. The coach, who led his team to a 2014 Super Bowl victory and a near repeat win the year after, is known around the league as being unusually supportive of individual player opinions and personalities. He encourages loud music in the locker room. His team meetings often involve a game of mini basketball. When he reviews video of past games with his players, he tends to focus on wins, not losses. "That sounds an awful lot like autonomy-supportive coaching to me," Hodge says.

The New Coaching

Whether intentionally or not, many if not most successful coaches employ elements of self-determination theory. As evidence builds supporting the philosophy—and discrediting authoritarian approaches—more coaches will likely get on board.

"I really think the theory has contributed greatly to sports psychology," Michigan State's Gould says. "I try to get coaches to identify specific ways they can meet athlete autonomy, competence and relatedness. My experience is that great leaders know how to build strong coach-athlete relationships, which is a key to leadership effectiveness."

None of this is to say that coaches should go soft. Individual coaches must find their own approach, Gould says, and adapt it to their given roster of athletes. A variety of coaching styles will surely be on display at the Olympic Games in Rio. That will likely include some gruff demeanors and letting loose with some well-timed tirades. Even Coach K, for all his social nuance, loses his cool every now and again. M

MORE TO EXPLORE

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