

Coaches Reveal Most Important Factors Determining Performance

Surprise: Training doesn't even make the top three when it comes to what coaches think is crucial.

By Elizabeth Millard, Sep 20, 2023

When you're considering the variables that can get you to your next PR or ready for a major race—or maybe both—most likely you'd put training first on that list. But a recent [survey of coaches published in *Sports Medicine*](#) found that for most respondents, physical training didn't even make the top three in terms of factors for better performance.

The survey involved 106 coaches with a wide range of experience, with two thirds of them having coached individuals, and from a number of countries. When researchers asked them to rank the most crucial factors for modifying an athlete's ability to physically adapt to a training plan, only 28 percent indicated that the training itself was key.

The top variable? A solid coach-athlete relationship. Following that were factors like life stress, an athlete's belief in the plan, and psycho-emotional stress, with physical training coming after all of those.

"A good takeaway message is not to place too much emphasis on creating the perfect training plan, as such a thing does not exist," according to lead researcher Kechi Anyadike-Danes, PhD(c), researcher in the department of intervention research in exercise training at the University of Cologne in Germany. He tells *Runner's World*, "Instead, more time could be allocated to other factors which are just as important, such as improving coaching interactions and monitoring mental health and wellbeing. These factors are often viewed as afterthoughts, when in fact, they're the basis on which performance is built."

Building the Coach-Athlete Relationship

Another significant takeaway from the recent survey is how a coaching bond can make or break a training effort, says Anyadike-Danes.

An aspect not covered in the survey but that may inform the selection of a running coach is the way coaching has changed in the past couple decades, said [Rocky Snyder](#), C.S.C.S., a strength training coach in California.

"Coaches lift you up to perform at a higher level," he says. "They do not break you down and tear you apart. There are still some old-school coaches out there who believe yelling, berating, and ridiculing, are effective means to breeding champions. More coaches these days take a more positive, supportive tack. Great coaches are masters at creating buy-in with their athletes and other coaches. Great coaches are able to be leaders, mentors, and counselors, and even more importantly, they know when they must take on the role of one or more of these."

If you don't have a running coach yet, Snyder's advice when you're shopping around for one is to write down what has worked in the past for you as an athlete and what has definitely not worked. Most notably, focus on what aspect of overall performance you need the most guidance and support, and ask coaches about their philosophy to see if it aligns with those goals.

"Just remember your decision is not permanent and you can always change directions if you are not heading where you want to go," Snyder adds.

Of course, creating a more solid coaching relationship doesn't fall only to the athlete. The recent survey should be a heads-up moment for coaches as well, says Anyadike-Danes.

"Having a good relationship and knowing the athlete in front of you is incredibly powerful," he says. "As an example, being able to have honest and open communication allows for the alignment of views around training, increasing buy-in to the training process and the ability to modify and update training where necessary."

Another aspect of the recent study that's helpful is "belief in the plan," and that's easy to cultivate when a coach is pointing out your progress, but if you don't have a coach, it can be more challenging, says Snyder. That said, he suggests tracking a few variables outside of your performance specifics: Sleep and mood.

"How many hours are you sleeping and do you feel rested when you wake up?" he says. "Deep sleep patterns can be indicative of proper training and an indication of progress. Similarly, feelings of satisfaction and happiness can be indicators that your program is working. Training at the proper intensity can release feel-good hormones."

Relieving Stress

As a point of clarification on those seemingly duplicated stress findings in the recent survey: Life stress is what happens to you, as an external stressor, while psycho-emotional stress is how you respond to it, creating an internal point of tension. Both can have a meaningful effect on performance and training, says Anyadike-Danes.

Recognizing your response to stress is a solid first step, and it's also crucial to build in strategies to make you more resilient to stress rather than always responding, adds

Snyder. Those tactics include getting quality sleep, taking regular work breaks, getting outside, eating healthy, and doing some form of meditation or mindfulness. All of these have evidence behind them as stress busters. For example, a [study in the *European Journal of Nutrition*](#) found that higher consumption of fruits and vegetables lowered perceived stress in participants.

There's another aspect to stress that should be considered with performance, and that's the role of physical stress and its benefits, according to [Alexander Meininger](#), M.D., orthopedic surgeon and a founding partner of Steamboat Orthopaedic & Spine Institute in Colorado.

"We can break down the effects of exercise in terms of load," he tells *Runner's World*. "Load is the overall cumulative effort of the exertion performed, be that mileage, speed, intensity like intervals, or repetitions. The body's response to load is different for each individual, however. And that helps to explain why recreational athletes undergoing the same training plans may get very different responses; or why a seasoned competitive athlete may find themselves on a performance plateau. This is sometimes better characterized as stress."

Stress can be measured objectively with tools that assess physical factors, such as heart rate, for example, and it can also be determined subjectively, by what an athlete is feeling, such as perceived rate of exertion. Meininger notes that both are effective, and they give an indication of how stress may be contributing to overtraining.

While some degree of stress is helpful both physically and mentally as a way to progress as a runner—for instance, muscles need stress in the process of getting stronger, and the brain can use stress to solidify a gritty mindset that pushes you through those last few marathon miles—too much may tip you toward a plateau, says Meininger. That's when you may have effects like fatigue, muscle soreness that takes days to resolve, reduced motivation, and even diminished joy in running.

Recognizing the nuances and multiple types of stress that play a role for athletes is an important part of performance, no matter what the sport. In addition to building a better coach-athlete relationship, delving into how stress affects you is another top way to avoid plateaus and overtraining, according to Meininger.

"Evaluating the whole person is a paradigm shift in sports medicine because we have to acknowledge that each and every part is interacting and impacting the other parts," he says. "The same is true in evaluating performance. Weights lifted or miles run: these alone do not reflect the athlete's performance. We have to consider the psyche, the relationships, and the recovery of each athlete to make an individualized plan."